THE LITERARY DIGEST

PUBLIC OPINION (New York) combined with THE LITERARY DIGEST

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TOPICS - OF - THE - DAY

HOW THE RATE RISE WILL TOUCH THE FAMILY PURSE

JUST AS THE SKIES ARE BRIGHTENING for the consumer with unmistakable signs of lower prices for many commodities comes the railroad-rate rise that is expected to add $12 to $15 per capita to everybody's bills in higher prices. The new rates, as the New York *Tribune* puts it, "drive another nail in the coffin of the hope that the cost of living is to fall." It is certain, we read in the New York *Evening World*, that "either living expense will increase or else living costs can not decrease as much as they otherwise might." The new schedules will add about $1,400,000,000 to the income of our railways, and this burden, observes the Newark *Ledger*, "the producer, the wholesaler, the jobber, the retailer, and finally the ultimate consumer, will be called upon to shoulder." To meet the railroad deficit and the cost of the recent $600,000,000 wage-increase, freight-rates in the East are to go up forty per cent., in the South twenty-five per cent., in the West thirty-five per cent., and in the Mountain-Pacific territory twenty-five per cent. In addition to these freight-rate increases, the Interstate Commerce Commission has decided to allow a twenty per cent. advance in passenger, excess-baggage, and milk tariffs, as well as a fifty per cent. surcharge on Pullman fares. Roughly speaking, the rise in passenger-rates amounts to half a cent a mile. No one, as the Pittsburg *Chronicle-Telegraph* points out, can hope to avoid paying his share of the railroad workers' wages and the cost of new railroad extensions and improvements by merely refusing to travel. Of course, it says, "those who travel most will pay the most, but the freight item can not be avoided at all. There is no one who does not use articles which must be transported by rail." "Every pound of food eaten, every ton of fuel burned, every garment worn, and every stick of timber entering into the construction of homes will contribute its share" to the gigantic total, reasons the Washington *Post*, which estimates that it means a per capita tax of $12 on every man, woman, and child in the country for higher freight-rates alone, and perhaps $15 when all the increases are taken into consideration. In view of such estimates and the prediction of one transportation authority that the higher railroad rates "probably will stop the movement recently inaugurated for reducing the prices of the necessities of life," and may "precipitate a revelry of high prices and high wages," we believe it worth while to gather for our readers the views of leading authorities in various important industries on the precise effect of the new rates in their respective fields. In some cases the statements are found in newspaper interviews, in others they come in response to direct telegraph and telephone queries. Conditions vary so widely in different industries that it is difficult to deduce any single conclusion from this survey. It is not unfair, however, to say that a large proportion of representative trade journal editors see little danger of such a slump in buying as to produce a business depression, and many agree that the increase in prices will not be great and that such as it is, it is practically counterbalanced by the greater efficiency which will come to the railroads with their increased income.

These views of specialists, which are quoted further on, are reflected in the prevailing newspaper comment on the rate decision. Most newspapers profess to rejoice in the decision, arguing that its good results outweigh any evils that may come in its train. The exceptions are naturally the more radical journals. One Western labor daily, the Butte *Bulletin*, calls the rate increase "just another attempt to mulct the public generally so as to further increase the profits of the rail owners," and the Socialist New York *Call* comes forth with this bitter comment:

> "Not a thing that we must have in order to continue to exist but will cost more as a result of this increased privilege to loot the American people given the railroad owners. The water that you drink, the food you eat, the clothes you wear, the coal that warms you in winter, the ice that is a necessity in the torrid weather, the house that shelters you, every necessity for continued existence will pay toll to the most greedy crew of thieves that has ravaged any people."

Conservative editors and business men agree at least that the public must pay the cost, and even such an organ of finance as *The Wall Street Journal* remarks: "'Increased rates will amount to no more than five cents on a suit of clothes'; but in traveling from producer to consumer a nickel becomes like a snowball rolling down-hill." Unfortunately, admits Mr. James H. Post, the sugar magnate, "every article is transported several times as a rule in raw and manufactured form, and the new rates will be reflected in prices adding to the already burdensome cost of living." The public, says the president of the Manufacturers and Importers Association of America, will have to pay more than the mere increase in shipping charges, "because an increase in rates means an increase in investment." As the New York *Journal of Commerce* explains this point:

> "The manufacturer or producer is affected by the new freight-rates—or by any freight-rates—in the cost of his building and construction, in the expense of his raw materials, in the advances in wages which grow out of the higher cost of all things consumed by his employees, and finally in the cost of shipping his finished product. . . . He has to bear the reflected costs of the freight-rate increase carried through many lines of business and manufacture and embodied in all prices. This is not a case of 'profiteering,' but the usual and unavoidable inclusion of costs of production in the final charge to the consumer."

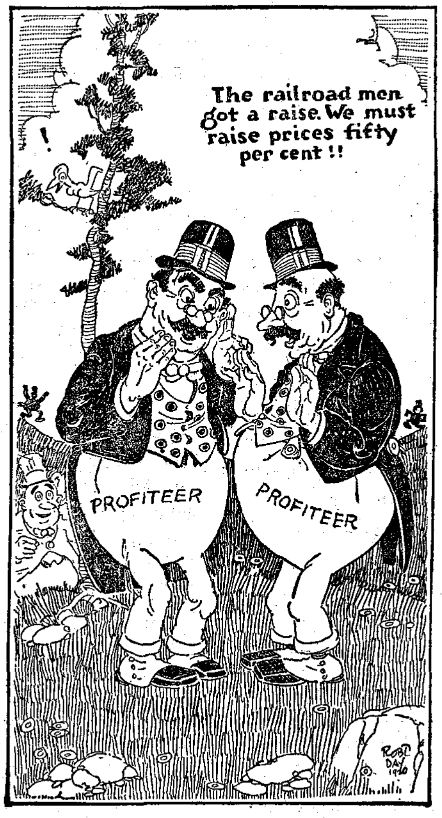
But admitting the truth of such arguments, and with full realization of the enormous sum which must come from the pockets of the public, the press generally accept the situation cheerfully. In the first place, as the Albany *Journal* notes, the burden "will be so widely distributed that nowhere will the share be felt as a severe burden." Prices may go up, but, observes the Baltimore *Sun*:

> "There are some other aspects of the case to be considered. One is that the consumer would have to pay the bill in any event.

He would have to pay it if the present rates were continued and huge deficits continued to mount up which the Government would be obliged to repay and to raise the money required by taxation. He would have to pay it in larger measure if a permanent policy of government ownership and government operation were adopted and the inefficiency which always accompanies bureaucratic control resulted. He would have to pay, just as surely and more greatly, if the roads remained in private hands, but through hampering regulation were prevented from earning a fair return on the money invested in them. For this would result in deteriorated service, which is the most costly thing of all.

“One thing, above all, is to be borne in mind. If the higher rates result, at length, in improved service, they will tend to decrease rather than to increase prices. Transportation costs are a small proportion of the total cost to the consumer. The answer to the pyramiding argument is, not that the railroads should be deprived of living rates, but that pyramiding should be prevented. For the rest, the added cost due to increased rates will not be intolerable. It will be utterly insignificant in comparison with the reduction in price of many commodities which will ensue if distributive methods are improved.”

“The new freight-rates should add very little to prices of such individual things as a pair of shoes, a shirt, a hat, or a suit of clothes,” concludes the Minneapolis *Tribune*, “if the equities are fairly observed in the general business world.” But there's the rub, as many editors admit. Any increase in prices more than is necessary to cover the cost of increased transportation is “rank profiteering,” the New York *Commercial* declares, “and should be punished accordingly.” In Washington, we read in the dispatches, the Department of Justice is preparing to check up on price advances following the rate-increase, and will act promptly to prosecute profiteering, altho a correspondent of the New York *Times* notes that “in the opinion of those who have followed the investigations into high prices and profiteering only an aroused public sentiment will be effective in keeping the prices within justifiable limits,” and *The Times* comments editorially to the effect that while profiteers may try “to cover increases of prices with the mantle of the rate-increase, they are bold who dare to add the freight on a case of shoes to each pair, or on a lamb's carcass to an order of chops in a restaurant. Buyers who endure that extortion are simple and foolish.”


The railroad men got a raise. We must raise prices fifty per cent!!
PROFITEER
PROFITEER

THE GATHERING OF THE CLAN.

—Day in the Los Angeles *Times*.

Such an authority on economics as Mr. W. Jett Lauck believes that the consumer has no occasion for alarm unless the profiteer is allowed to take advantage of the situation. As he says in a statement widely quoted in the press:

“For instance, by no possible computation can the increased freight-rates be made to justify an increase of 1 cent per pound in the price of meat to the consumer, an increase of 5 cents per pair in the price of shoes, an increase of 10 cents in the price of a suit of clothes, or an increase of one-fourth of 1 cent in the price of a loaf of bread. . . . . .

“Coal is one commodity the price of which will be directly and appreciably increased by the advance in freight-rates, the increase ranging from 75 cents to $1.35 per ton, but even that does not make a very great difference in the annual budget of the family.

“The increase in freight-rates should have no appreciable effect on the prices of the vast majority [illegible] which the ordinary consumer purchases. This is [illegible] reason that in the case of almost all ordinary comm[illegible] of transportation at present is such a negligible [illegible]ng price that an increase of even forty per cent. in freight-rates would be an unimportant addition.”

Turning to the influence of the rate-increase in specific industries, we note a general agreement in the daily press that it will be perhaps most directly apparent in the case of coal. And we read in *The Black Diamond* (Chicago), an organ of the retail coal trade:

“The increase granted railroads on freight-rates will cause a temporary increase in the price of coal at destinations. Eventually the effect of the increased rates will be to stimulate coal production, and lower prices.”

A similar situation holds in the iron and steel industry. *The Iron Trade Review* (Cleveland) believes that increased rates in most cases will be carried to consumers of steel in higher quotations, but it considers the outstanding significance of the award to be “the promise of better transportation service, this being of greater importance at present than price.” *The Iron Age* (New York) is more specific:

“In iron and steel the increased freight-rates will probably represent an addition of $1.50 to $3 per ton to present costs, the exact amount depending on location of plant with reference to raw-material supplies. The public need not be greatly concerned about the increase in iron and steel freight-rates. The principal buyers of the products of iron and steel works are manufacturers who convert iron and steel as they come from the producers' works into machinery and the thousand and one products of foundries, machine shops, and other metal-working plants. The manufacturing buyers of rolling-mill products will pay the increased freights rather than the producers, since these products are sold f. o. b., mill. The same is true in the case of pig iron, the selling price being for the iron at the furnace.

“It is to be considered in connection with increased railroad charges for carrying iron and steel that the railroads are normally buyers of from one-fourth to one-third of the product of the country's steel-works. Therefore, if in the years just ahead railroad buying of steel is on a scale compensating for the abstemious buying of the years last past, the railroads themselves will bear a considerable part of any advance in steel prices that may be due to higher transportation charges.”

Turning to another basic industry, the lumber trade, we find *The American Lumberman* (New York) and *The Lumber Trade Journal* (New York) agreeing, in the words of the latter, that the new rates “mean higher prices to the public for all the lumber it buys.” *The Southern Lumberman* (Nashville) finds that—

“The rate-increase will result in increased prices to the ultimate consumer not only on account of a passing on to the consumer of the actual freight-increase, but also on account of the fact that the increased rates will make it impossible to market certain low grades of lumber, thereby necessitating higher prices for the upper grades. . . . Lumbermen will indirectly feel the effects of the rate-increase by reason of the fact that nearly $1,000,000,000 of the carriers' increased revenues must be spent for cars, which will result in a heavy demand for lumber used in car-building, also the improved transportation conditions which should result from the rate-increase will be welcomed by lumber-shippers who have been seriously hampered by car shortages and traffic congestions.”

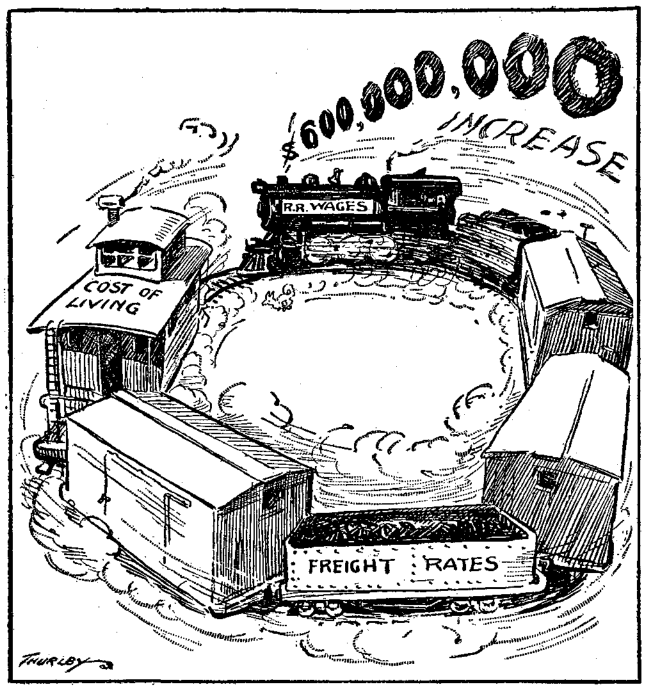
In the building trade there seems to be some difference of opinion about the new railroad rates. For instance, the editor of *The American Contractor* (Chicago) thinks it unfair to increase the rate on building materials in a period when the national need is for more homes and factories. On the other hand, *The American Builder* (Chicago) says:

> "Increased freight-rates will mean better transportation, more cars, and prompter shipments, which will be decidedly beneficial to the building industry. Prices may strengthen temporarily, but with the increased production and sure delivery of building materials which we foresee prices will gradually ease off."

The president of the Royal Typewriter Company expects "an increase or stabilization of present high prices on manufactured goods." The editor of *The Manufacturers' Record* (Baltimore) similarly looks for "great business expansion and a tendency toward high prices." The editor of the magazine *Factory* (Chicago) expects what he calls "a tandem effect" from the railroad-rate decision: "first, perhaps, rather immediate increase in prices, followed after a period of months by a gradual reduction," due to "a quickening of business."

In the clothing field we find the influence of the rate-increase contending with an existing downward-price trend. Of course the new freight-rates must increase the selling cost in some lines, but, observes *The Dry Goods Reporter* (Chicago), "in the face of conditions that make the consumer look for lower prices of dry-goods and wearing-apparel, retailers will be reluctant to raise prices." *The Dry Goods Economist* (New York) appeals to the trade not to take undue advantage of the increase in freight-rates. It says: "The manufacturer, jobber, or roadman who at this time refrains from predicting higher prices because of higher transportation cost will perform a public service and at the same time will avoid taking a position which later developments may show to be largely, if not wholly, erroneous." This journal and garment manufacturers quoted in the New York *Tribune* agree that higher freight-rates may be offset by the greater efficiency of the railroads enabling manufacturers to send goods by freight instead of the more costly method of shipment by express.

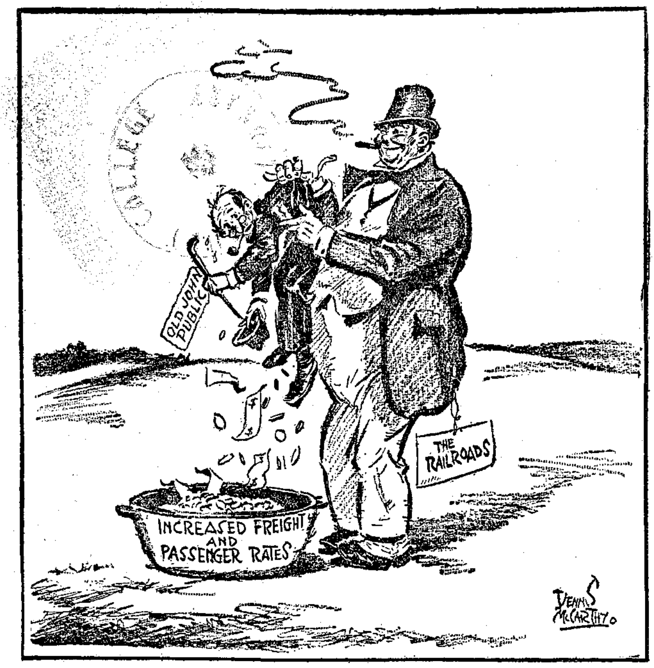
In the shoe and leather industry the effect of the railroad-rate decision will be beneficial, according to *The Shoe and Leather Reporter* (Boston), because the trade has suffered greatly from delays in transit, and "expensive expedients have been resorted to with little success."



ANOTHER BURST OF SPEED.

—Thurlby in the Seattle *Times*.

Many a housewife is asking what the effect of the rate advance will be on the grocery bills. New York food merchants are quoted in the press as of the opinion that there must be a six to eight per cent. increase in the cost of foodstuffs. It is encouraging, however, to hear from *The Northwestern Miller* (Minneapolis) that the increased freight-rates "may actually reduce prices of wheat to millers, and consequently of flour to consumers." The Minneapolis editor calls attention to the effect of the car shortage in preventing the delivery of both wheat and flour, and thereby keeping prices up. Now, with the roads able to buy additional rolling stock, "the fact that each month will probably see a definite improvement should be sufficient to offset any price increase due directly to higher freights. Both the milling industry and the consuming public are likely to benefit greatly from the decision." Mr. James H. Post, president of the National Sugar Refining Company, admits that "when sugar has to pay higher rates for transportation the grocer naturally passes them on to the consumer." The editor of *Sugar* (New York), however, believes that "the present sagging price tendency of the sugar market will probably not be offset by the increase in freight-rates." New York City milk distributers are quoted in the press as predicting that the twenty per cent. increase in transportation rates will be passed on to the consumer, and we read in *The Dairy Farmer* (Waterloo, Ia.):



POPULAR METHOD OF GRANTING WAGE-RAISES.

—McCarthy in the New Orleans *Times-Picayune*.

> "Since the beginning of the war dairy farmers have been producing milk and butter on very narrow margins of profit. . . . Therefore the railroad-rate decision will only further disturb dairy conditions. Consumers and milk dealers must expect to pay slightly higher prices for milk and its products if a serious shortage amounting to a near famine is to be avoided. Not alone must the twenty per cent. raise on milk rates and the increased freight-rates on butter and cheese be met, manufacturers of diary feeds, equipment, building materials, repairs will necessarily pass along to the dairyman the accumulation of additional costs the railroad-rate decision will cause."

We must have sugar-bowls and milk-pitchers for our sugar and milk, and it is encouraging to find *The Crockery and Glass Journal* (New York) predicting that the rate advance "may, if used judiciously, be instrumental in bringing about not a decrease, which is at present impossible, but at least a stoppage in the ever-mounting cost of china, glass, and associated articles—this statement being made in view of the fact that poor transportation, in which the railroads were the chief offenders, was one of the factors responsible for the high cost of the goods."

THE EMPLOYER'S DUTY TO EMPLOY

THE RIGHT TO STRIKE has been invoked when labor would walk out or take a vacation. But when capital would turn the tables, labor leaders insist on the worker's right to work and on the employer's duty to furnish a steady job. In fact, a labor revolt is threatened by President Gompers, of the American Federation of Labor, if industries attempt to reduce wages or follow the examples set by the Pennsylvania Railroad in cutting down their forces, or by the American Woolen Company in shutting down their mills. "But," the New York *Times* reminds us, "Mr. Gompers put the same chip on his shoulder back in 1918," and the New York *World* thinks the warning "is of more practical importance in its political than in its economic bearings," and that "to this extent it is well timed and well placed." Mr. Gompers declares that the Federation will "resist" the reduction of expenses by manufacturers through any of the above methods, and he is thereupon assured by the New York *Journal of Commerce* and other papers that if he carries out his threat, and does not permit organized labor to aid in the process of reconstruction now being carried out, "the verdict of public opinion, already heavily against the labor-leaders because of their selfish and short-sighted policy during the past year or two, is likely to become even more severe."

"The day is passing when every man can get a good job at a big wage simply by asking for it," warns the Grand Rapids *News*, and *The Wall Street Journal* more specifically adds that "railroads in the East find both skilled and unskilled labor more abundant and of better quality," and that in the ship-building business on the Delaware River there is not a scarcity of men, while similar conditions are to be found in the Baldwin Locomotive Works of Philadelphia. The country still continues to urge increased production, and it is this attitude of the country and the action of the Pennsylvania Railroad, the American Woolen Mills, and other industries in laying off men and reducing wages that seems paradoxical to Mr. Gompers. "How can increased production be accomplished under a policy of laying off thousands of workers?" asks the veteran labor-leader. He then goes on:

> "The nation needs production. Employers have called for production too frequently as a means of driving the workers to unpaid efforts and in order to cast a reflection upon their efforts and their honesty and integrity. There is no trouble with the efficiency of the workers. There is a growing efficiency of workers. There is too infrequently an equal efficiency and integrity and intelligence in the management of industry. The action of corporations that to-day lay off thousands of men is nothing less than a tremendous indictment of management and a heinous offense against a people in need of every possible ounce of production.
>
> "What is needed above everything else to-day is continuous operation of industry, with a fairness and honesty and intelligence upon the part of employers that will make continuous operation possible. Two employment policies will hinder production. These are either reduction of working forces or brutal efforts to drive the workers without consultation and without agreement with the workers.
>
> "The mills and the factories should run. Management should consult with workers through the chosen representatives of the workers. The cooperation to be achieved by such a policy will give the nation the production that it needs and that is needed by the whole world. Arrogance, bigotry, and autocratic conduct of employers is a waste that society can ill afford."

"The country needs production," agrees the Washington *Post*, "and no man is better fitted to help bring it about than Mr. Gompers. It is unfortunate that he did not commend the policy that the employer is entitled to a full and honest day's work for the high wages he has been paying." Under government operation, charges the Rochester *Post-Express*, "the railroads put tens of thousands of superfluous workers on jobs at which they dawdled, and it now takes more blanks, indorsements, reports, duplicates, documents, and memoranda to move a bureau than it used to take to move ten tons." This paper approves the Pennsylvania's move, as it is sure "more freight will move faster under the new order of things." We are further informed by the Baltimore *News* that Pittsburg manufacturing interests and business houses will take as many of the discharged employees as they can get. *The News*, therefore, looks upon the railroad's action as "not a beginning of unemployment, but a transfer of men from jobs where they are not needed to positions where they are urgently wanted."

"Except upon the condition of greatly increased efficiency in production, wages have no more right or reason to expect an indefinite continuance of the present extraordinarily high level than commodity prices have to expect the same thing for them," says the New York *World*. "Efficiency in industrial circles is an essential condition of true prosperity, and there can be no real recovery without it," the Springfield *Union* assures us, and other papers say that efficiency and industry by workers have been conspicuous by their absence in the past two years, which leads the Philadelphia *Bulletin* to remark that "this is a serious indictment of labor, and should not go unanswered." *The Bulletin*, however, admits that nowadays "it takes more men to accomplish a given task, whether building a house or operating a railroad, than formerly," and the Peoria *Transcript* repeats the assertion of the president of the building trades section of the American Federation of Labor to the effect that "the wage-earner is just as much responsible for the high cost of living as any other agency; if every worker would insist that production equal that of prewar times, there would soon be a reduction in the price of commodities." But there is a silver lining to this cloud, according to the Lincoln (Neb.) *State Journal*. "We are getting over the idea that a people can prosper by mulcting each other; we are getting into the stage of honest confession—which is good for the soul," notes this paper. The Springfield *Republican*, which in the past two years noticed a falling-off in efficiency, probably because of labor shortage, industrial unrest, high wages, the reaction from war, and the high cost of living, now notes an increase in efficiency, and attributes this to profit-sharing, bonuses, high wages, welfare work, and education of employees along economic lines. In the Youngstown steel district the Providence *Journal* finds a notable increase in efficiency, but attributes it to an oversupply of labor. Mr. E. H. Gary, the head of the United States Steel Corporation, recently announced that, "much to his surprize," labor at various steel plants "is more efficient per man than at any time during the past five years." And a questionnaire sent out by the Merchants' Association of New York brings similar reports from manufacturers. But *The Iron Age* (New York), citing instances where superintendents of industrial plants obtained almost miraculous results in efficiency by discharging men by scores, giving out statements that no more men would be hired, and cutting down the working force even as much as one-third, yet obtaining almost as much production from the reduced organization, is forced to come to the following conclusion:

> "The cocksure attitude of workmen is not so common as it was a few months ago. In some branches of industry forces have been reduced, and while there is no great unemployment anywhere, men are becoming more jealous of their jobs. The workman, altho he may not be in close touch with the 'front office,' knows that in some lines there have been many cancelations of orders, that production is being retarded by lack of raw materials and inability to ship out finished product, and that many companies are hampered in the conduct of their business by tight money and frozen credits. If he is a wise workman he will realize that to-day the manufacturer is not under the same compulsion to overlook slothful work as he was a few months ago when conditions were quite different.
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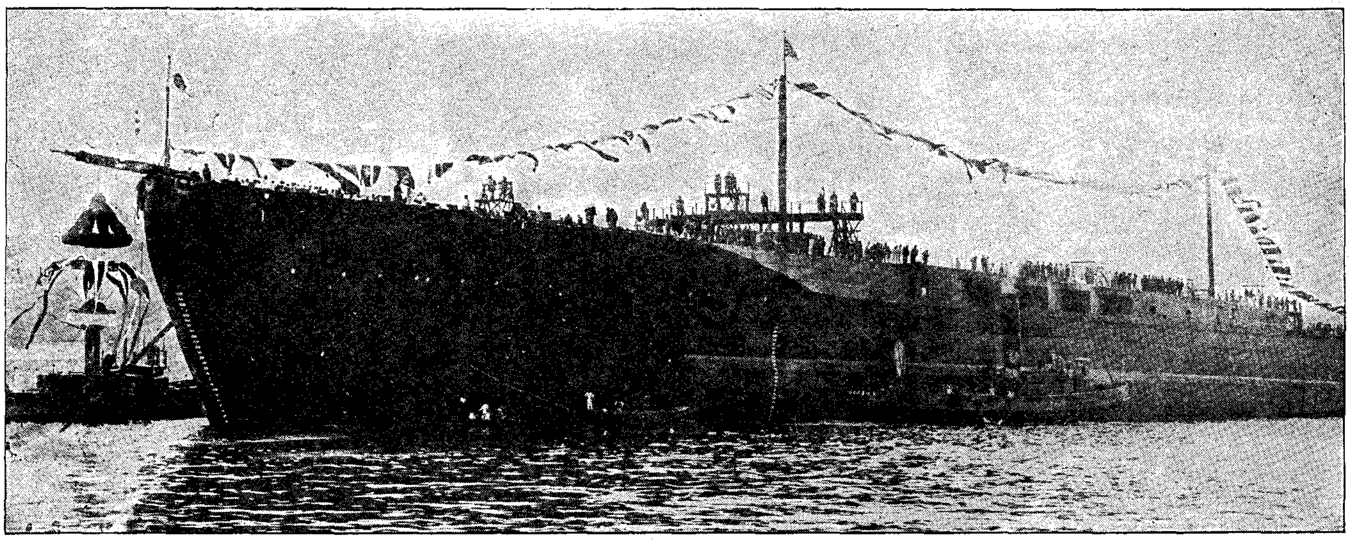
> "Judging by the complaints of manufacturers, there is still much room for improvement in the attitude of workers toward their jobs, and particularly toward the common problem of maximum production."



JAPAN'S NEW $40,000,000 SUPER-DREADNAUGHT *MUTSU*.

The most expensive fighting-ship in the world, costing $14,000,000 more than the British battle-cruiser *Hood*. The *Mutsu* is of 33,800 tons displacement, carries eight 16-inch rifles, and was christened by the Empress of Japan.

JAPAN TAKING SAGHALIEN

"WHY SHOULD WASHINGTON strain at the Saghalien gnat after swallowing the Shantung camel?" asks the Detroit *Free Press* in connection with the recent occupation of the northern half of that island by Japanese troops. But a number of other nations have joined the United States in asking an explanation of Japan's intentions in the Far East, altho the Providence *Bulletin* believes that "any other time than the present Saghalien would appear to be a local issue between Japan and Siberia." The fact that the United States and Japan both sent troops to Siberia under a mutual agreement, however, with the understanding that they and all other nations allied in the world-war should keep "hands off" Russia until the majority of her people could set up a regularly constituted Government, gives the United States a right to ask Japan to define her policy in Siberia, in the opinion of Tokyo officials and American editors alike. At Washington, according to the correspondent of the New York *Times*, it is realized that the Japanese Government is in a difficult position on account of the growing influence of the militaristic party there, and we are told in a Tokyo dispatch that the "nervous crisis" through which Japan is passing is due in part to the apprehension concerning the Congressional inquiry of Japanese in California. The Seattle *Times*, however, is just as sure that "these ostensible causes are but the froth on the surface of events in Japan," and that "we must look further for the underlying causes of Japan's unrest and uneasiness." "American relations," says *The Times*, "merely serve as a stalking-horse to divert popular attention from other matters that menace the stability of the state, and perhaps actually jeopardize its position as one of the Great Powers." And we read on:

> "The fact is that Nippon is all but isolated at a time when it confronts the most serious problems of its modern history. It is trembling on the verge of a great decision and does not see its way clear no matter what it elects to do.
>
> "The Chinese boycott is hitting Japanese manufacturers hard—so hard, in fact, that diminished sales in this quarter, coupled with the slump in the American silk market, have brought the business interests of the country face to face with a critical situation.
>
> "Wages in the new industries are falling and unemployment is becoming alarmingly wide-spread, while living costs, which mounted during the war, remain very high.
>
> "Electoral reforms are demanded and a very considerable body of public opinion has been developed, which is driving in a direction which menaces the control exercised over the country by the classes that have governed it for centuries."

The lower half of Saghalien was awarded to Japan by the Portsmouth Treaty in 1906. The island, which lies between the Siberian mainland and Alaska, has an area of twenty-nine thousand square miles and a population of about thirty thousand. The massacre of several hundred Japanese at Nikolaievsk on the Siberian mainland, we are told, led to the seizure of the entire island. The occupation is to continue "only until a Government has been established in Russia that will be able to furnish satisfaction for the massacre of Japanese subjects," declares the Japanese Premier. But the Chicago *News* finds fault with the Japanese explanation; the Pittsburg *Sun* believes that "a bad situation is boiling up in the Far East"; the Lowell *Courier-Citizen* predicts danger for Alaska when Japanese aggression shall have established that nation along the Siberian mainland to Bering Strait, and the Greensboro (N. C.) *News* asserts that "Japan is laying the foundation of a great empire in the East." Continues *The News:*

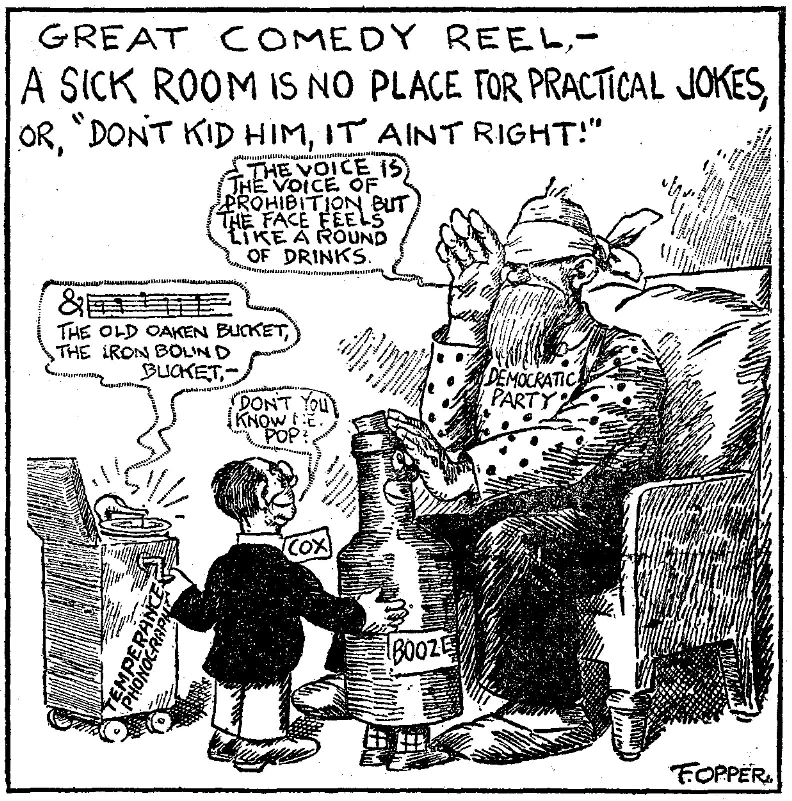
> "For that is what is going on. The Land of the Rising Sun is working day and night to make herself mistress of Asia. Shantung, Korea, most of Manchuria are hers already, and now she is taking over Siberia. Soon she will be in position to dominate China, to convert the new republic and the ancient friend of the United States into a replica of Austria. If her plans suffer no check, . . . the empire of Japan will be ready to try conclusions with the western world.
>
> "We do not believe that a fight with Japan is inevitable. But we do believe that if we are to avoid a fight with Japan, we must take sensible precautions against it, and that Japan must do likewise."

According to observers who recently have come from Siberia and the Far East, "the greatest stumbling-block to the prompt reestablishment of order there is the unwarranted interference of Japan," reports the Cleveland *Plain Dealer*, altho, as the New York *Evening Post* points out, "Japan is pledged to respect the integrity of Russian territory." And *The Post* goes on:

> "The replies of the Japanese Premier to questions in the Diet regarding the purposes of the Government in the continued occupation of Russian territory are evasive. The contention that the loss of Japanese lives at Nikolaievsk is justification for such action, to insure compensation when a stable Russian Government shall arise, is not adequate. Other nations have claims for damages which are being held for presentation to any Government in Russia which may finally be recognized, but none of them has considered that a justification for seizing Russian territory, even temporarily."

The Washington *Post* agrees that "the acquisition of Saghalien is without justification; it is nothing but a naked seizure of a neighboring people's territory at a time when they are in distress and unable to prevent the aggression." Furthermore, says *The Post:*

> "The excuse given by Japan is that the Bolsheviki massacred Japanese soldiers at Nikolaievsk and that the country is given over to anarchy. There is apparently a mixture of reparation and reprisal in the performance. But there has been no real or colorable transfer of title by any constituted authority. The sovereign is Russia. Because this sovereign is temporarily distracted, Japan seems to be going on the theory that territory may be taken away in a one-sided process of adjudging reparation for the acts of Bolsheviki, who certainly did not act as agents of the sovereign. When analyzed, the seizure of the territory in question is seen to be an unwarranted act of aggression against a nation that is formally an ally and a friend."


GREAT COMEDY REEL,—
A SICK ROOM IS NO PLACE FOR PRACTICAL JOKES,
OR, "DON'T KID HIM, IT AINT RIGHT!"
THE VOICE IS THE VOICE OF PROHIBITION BUT THE FACE FEELS LIKE A ROUND OF DRINKS.
& THE OLD OAKEN BUCKET, THE IRON BOUND BUCKET,—
DON'T YOU KNOW ME, POP?
DEMOCRATIC PARTY
COX
BOOZE
TEMPERANCE PHONOGRAPH
F. OPPER.

Copyrighted by the International Feature Service. —Opper in the Hearst newspapers.

A HEARST VIEW OF IT.

What will come of this "nagging of Japan about the island of Saghalien, which in no way concerns us," in the words of *The Wall Street Journal*, few editors seem to care to guess. The Buffalo *Express*, however, declares that "if we wish to keep out of future wars, our Government must take a broader view of the needs and rights of other nations, even if they are not Caucasian." The Brooklyn *Eagle* is sure that "Japanese aggression will inevitably bring on a war if it goes on unchecked," and the Chicago *Tribune* agrees that a combination of events "will give us a war in the end—and it will be a good one." *The Tribune* then calls attention to these facts:

> "The United States did not protest when Poland decided to take more Russian territory than it had been given. We did not protest when the Baltic ports were taken away from Russia. We do not protest that we do not understand what is going on in the Crimea.
>
> "We do not say anything about the French in Syria or the Greeks in Thrace or the British in Mesopotamia. It is when the Japanese step over their threshold in any natural direction that the United States enters its protest."

But the Columbus (Ohio) *Dispatch*, which thinks the California situation is more serious than the occupation of Saghalien, is sure there is "no imminent danger of war between the two countries; the Japanese menace is probably not as great as nervous people imagine." But—

> "It is great enough to cause us to remain awake always. We know the nature of the Japanese, and are familiar with their ambitions. But we also know that Japan could not now afford to go to war with the United States under any circumstances, and that we have no desire to go to war with her. So there is reason to believe that out of it all will eventually come that degree of peaceful understanding that should prevail between two such countries as the United States and Japan, but it will be well to use a good glass in watching the Pacific Ocean."

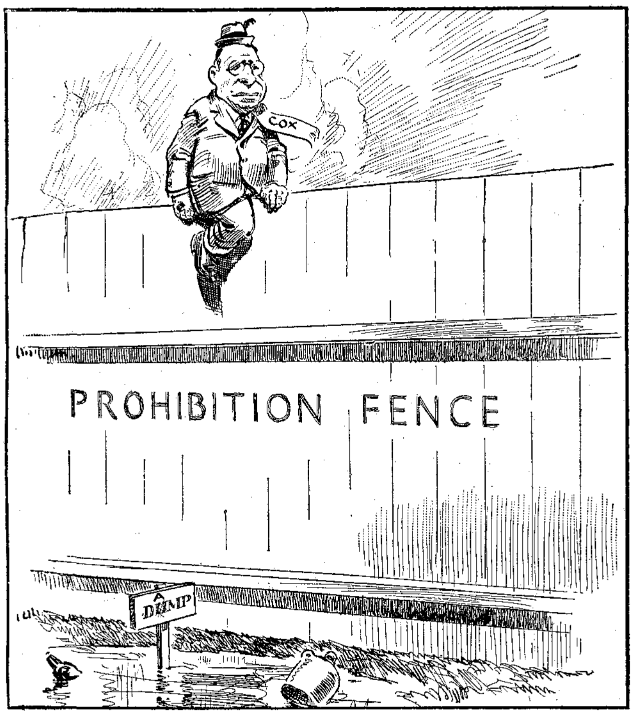
Japanese comment on this topic, with map, is quoted in our Foreign Department.

THE DRY DRIVE ON COX

"COX AND COCKTAILS—Harding and the Home!" was the Republican slogan suggested by the editor of the Seattle *Times* on the spur of the moment of Cox's nomination. But the Republican press were slow to take it up. Neither party platform contains a liquor plank, neither candidate attacks the Volstead Law or the Eighteenth Amendment, the Anti-Saloon League has refused to indorse either Harding or Cox, the Prohibition party has decided to go it alone against both old parties, and the politicians generally prefer silence to discussion of the liquor question. But as the campaign warms up a large number of influential Republican papers, particularly in the West, refuse to enter any "conspiracy of silence," and, in the belief that prohibition is one of the livest issues before the voters, are persistently carrying on an editorial campaign of posting up Cox as a "wet," which must be noticed in any intelligent review of the campaign. "It is particularly desirous that the country should get Mr. Cox right. He is as 'wet as the Atlantic Ocean,'" roundly declares the Tulsa (Oklahoma) *World* (Ind.), reminding its readers of Jim Nugent's "New Jersey casts twenty-six 'wet' votes for Cox," as reported when the shift started to the Ohio Governor in the San Francisco convention. "The Democrats are depending on booze and booze alone to elect Cox," insists the Portland *Oregonian* (Rep.), which specifies:

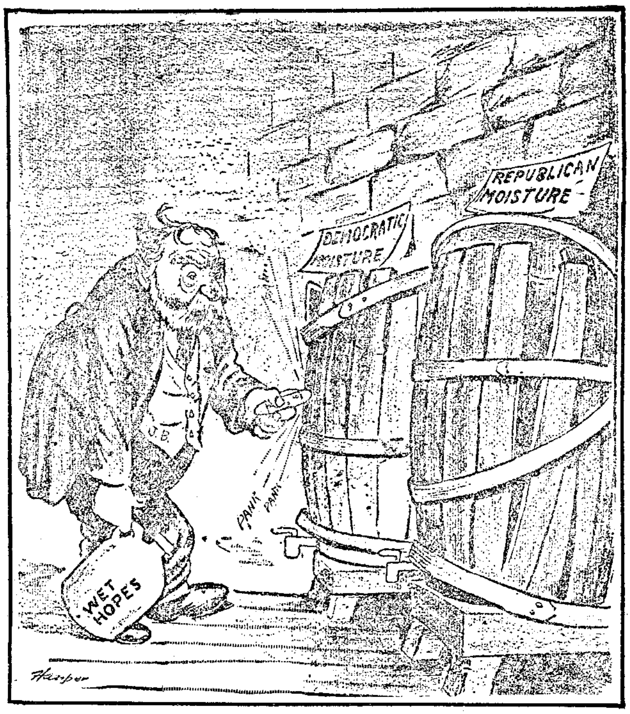
> "On the League, or on the Wilson record, he has no show whatever. On the 'wet' issue he has a chance in certain great States. They know it. They will make a whispering campaign there.
>
> "If Cox is elected it will be by booze and the appetite for booze. Every little paper in Oregon, and everywhere, that supports Cox is a partner, willing or unwilling, in the great scheme for an under-surface appeal to the 'wet' instincts, habits, and purposes of Tammany, its 'wet' allies and all the other 'wets.' Fighting for Cox they are fighting with the forces that are fighting for booze; and to that extent are themselves fighting for booze.
>
> "In New York it is the hand of Tammany; in Illinois, of Boss Brennan; in New Jersey it is the rule of Boss Nugent; in Indiana it is Boss Taggart that holds sway; and in Oregon it is the voice of Democratic partizanship, one hundred per cent. genuine, but hypocritically posing always as champions of the uplift, that would elect Cox, friend of light wines and real beer."

To *Capper's Weekly*, Topeka, the candidacy of Cox, "a liquor liberal," is part of a smooth political conspiracy in favor of booze headed by "Tammany New York, 'Jersey lightning' New Jersey, and rummy Rhode Island, constituting Hell's Half Acre in the United States," and tailed by "'wet' ward bosses from the cities and other 'brown-jug' Democrats." "The booze interests now have set out to elect a President," says this paper;



WE SHOULD SAY COX OCCUPIES A HIGH POSITION.

—Reid in the Philadelphia *Press.*



HARD TO TELL WHICH ONE HE'LL GET LESS FROM.

—Harper in the Birmingham *Age-Herald.*

REPUBLICAN AND DEMOCRATIC VERSIONS.

"after November we shall know whether a political party can carry a Presidential election in this country by sprinkling a little booze on its clothes."

Mr. Bryan is frequently referred to as authority for the statement that Cox "undoubtedly is wet," and Republican editors point out that to "face both ways" promises to be a difficult and hazardous undertaking. The New York *Sun* (Ind. Rep.), apropos of Richmond P. Hobson's question to the Governor, "Could you give me a clear statement of your being opposed to the Federal authorization of an increasing alcoholic content?" pictures Cox "between the devil and the deep blue sea." But the Kansas City *Journal* (Rep.), which asserts vividly that "Cox is stuck all over with beer labels," visualizes the Democratic managers ringing all the changes upon the Cox record and suggesting that any amendment to the Volstead Act must come from Congress. "So the Democrats," *The Journal* concludes,

> "plan to catch the 'wets' in the East and the 'drys' in the West, the office-holders in the South and the office-hunters in the North. A skilful analyst can find anything he is looking for in the San Francisco platform. On that platform the nominee can be all things to all men, sipping beer with the East and taking water with the West, and not batting an eye in any direction."

William Allen White, of Emporia, however, in his syndicated letters, declares that on prohibition Cox "must make a statement which will be conspicuously offensive to Tammany or he must lose the women of the Middle West, which means the loss of the Congress." He adds that "in the Middle West the 'wet' and 'dry' issue is taking its place as a paramount issue in the campaign." But how the women in New York and other pivotal Eastern States will vote is the only undetermined factor in the Democratic strategy of the Cox campaign, according to the Des Moines (Iowa) *Register* (Ind. Rep.), which quotes a London interview with Colonel House to prove it as follows:

> "I believe the country as a whole is largely in favor of strict enforcement of the Prohibition Amendment, but unless the women more than offset the vote of the men Governor Cox will have the advantage over Senator Harding in this respect and for the following reasons:
>
> "Prohibition sentiment, outside California, is stronger in the South and West than it is in the Middle West and East, but the South will probably vote the Democratic ticket. In any event, if it goes solidly for Governor Cox he will have about ninety less than a majority of the Electoral College to start with, and it is not unreasonable for him to hope that he can get the ninety votes out of the North and West."

As previously stated, the Republican newspaper campaign of playing up Cox as a "wet," no matter what he may or may not say, is chiefly a Western game. *The Rocky Mountain News,* Denver, scents peril to prohibition laws in the possibility of a moist Supreme Court majority by Presidential appointment. "Instinctively," it declares, "the people know there is a Senegambian in the wood-pile, or the liquor interests would not be so intent upon following up the advantage gained at San Francisco." Presenting a table of the ages of the present members of the Supreme Court, *The News* finds four Justices over the allotted three score and ten, three of the four well beyond it, so that actuarial odds are in favor of the next President naming three judges.

> "Two of the present Court, while not dissenting from the momentous opinion rendered by Justice Van Devanter on prohibition, made oral reservations and both belonged to the Democratic party—the party that once was for State rights.
>
> "It is perfectly within the bounds of probability that the next President may have the appointment of a majority of the Court. President Wilson has appointed three of the present Court.
>
> "The infusion of new blood into the Court might bring a change in the opinion of the majority on what is and what is not prohibition. A new law to take the place of the Volstead measure liberally construing the Prohibition Amendment to the Constitution might not fare so badly in a Court refreshed by several appointments from a new executive. The 'wets' believe they can elect a Congress this year or two years from now favorable to an entering wedge of beer and wine, but that would not be sufficient. The court of review, the tribunal of last resort and decision, must see things in a different light."

Many Republican editorials in the West and Middle West are of the type represented by *The Rocky Mountain News's* opinion that prohibition will forge more to the front as the campaign progresses:

> "It can not be downed, it can not be dropt by common consent. Party opportunists may be anxious to forget it in their speeches and pleas and raise other questions, but the people interested in the success of prohibition are not likely to permit a campaign of silence. The Democratic party is the 'wet' party

by tradition and through political necessity. The other party has been the leader in the movements which culminated in national prohibition. The Democratic party is dependent on the greater cities for its main strength—New York, Chicago, Boston, etc. The Republican party looks to the farmer for its strength. The Republican party has everything to lose and little to gain by burying prohibition. Solely as party strategy it is not expected that it will do so."

In the East the Philadelphia *North American*, for one, sees the "fatal issue" of booze fastened upon the Democratic party, but also sees lack of vision in Republican managers, else they would accept the Democratic challenge and take a courageous positive stand on a clear moral issue, but as a rule Eastern Republican papers accept the cue of the Republican national platform which ignored the prohibition issue as closed.

Among Eastern and Southern Democratic papers "rum is not the issue," avers the New York *Times;* "a professional 'dry' attack on Governor Cox would not even hold water," declares the Norfolk *Ledger-Dispatch;* "the next President of the United States is not a prohibition crank; it has never been his personal habit to violate an oath," remarks the Savannah *News*. Yet the Brooklyn *Citizen* (Dem.), noting the confusion of Republican "dry" charges against Cox and Democratic "dry" charges against Harding, concludes that "when the campaign gets to be a little older the consistency now lacking will become evident. Harding will poll the 'dry' vote and Cox the 'wet,' in so far as either is independent of regular party control."

Mr. Bryan, whose "heart was in the grave" after the San Francisco convention, but who declined the Prohibition party nomination, calls in his *Commoner* on the friends of prohibition to concentrate on the Congressional candidates. The Anti-Saloon League's organ, *The American Issue*, plays up this slogan: "Remember that Congress and Congress alone can weaken the Volstead code, and thereby render the Eighteenth Amendment inoperative."

Against Republican partizan attacks, of course, Cox has plenty of Democratic defenders who maintain that Harding has no advantage in professions of standing for enforcement of law over Cox's record. The Springfield *Republican* quotes in his defense from Governor Cox's message to the Ohio legislature in 1919, on enforcement of the State prohibition amendment. This statement, it declares, "has the true law-enforcement ring," and would indicate President Cox's attitude toward Federal "dry" laws. Governor Cox said:

> "The electorate has issued the mandate that intoxicating liquors as a beverage shall not be manufactured for sale, nor sold, and the responsibility of providing the means and methods of law enforcement is with the legislature.
>
> "This amendment is not the expression of a caprice. The subject in question has been persistent as an issue for several years. Nothing can be more subversive of the public interest than indifference to or defiance of the organic law of the State.
>
> "It has been suggested that the enforcement of the prohibition law be left to the communities and that the State content itself with the thought that local officials are sufficiently vigilant and the public interests will be safeguarded.
>
> "It is respectfully urged upon you to give place to no such sophistry. The Constitution throughout the years has reserved broad police powers to the State. True, they have been delegated, but the mere assignment does not in the least degree reduce the responsibility of the State.
>
> "On the other hand, the contention has been made that, inasmuch as the police power is first inherent in the State, and the prohibitory mandate is of such importance, the State alone should be the responsible unit. This is most unsound in theory and would be a dangerous practise. The spectacle of local officials paying no attention to the violation of the law on the theory that it was an affair of another governmental unit would be a travesty.
>
> "Reduced to plain terms, therefore, the enforcement of the law in the first instance should be with the public officers in the community, but a vigilant eye should be with the State, and power of removal from office should be given the Governor in case of delinquency."

SILVER LINING OF BUSINESS CLOUDS

"THE HARVEST MOON WILL BE BRIGHT and golden; the natural barometer has refused to indicate storms, in spite of the fact that the Federal Reserve Board has tried to be pessimistic in its July report," remarks the Boston *Globe*, in commenting upon the general business readjustment, with a resulting curtailment of industrial activity, that is noted in the Board's report for last month. The nation's industry is shown to have slackened during the month; there was considerable unemployment, particularly in the textile and shoe industries; a suspension of production in important industrial centers was noted; depression in some lines of business was caused by the holding back of autumn orders, says the report; the congestion in transportation affected many industries, particularly the steel business; the non-delivery of fuel and raw materials at points of production made it necessary to lay off men in large numbers; there was a decline in exports, which mainly affected shipping companies; a slowing down of collections was noted, also an increase in the number of business failures.

These happenings merely indicate that "the country is passing through a period of transition," says the New York *Journal of Commerce*. "Were these elements not largely offset by the more favorable conditions of general business, they might give ground for anxiety," continues this paper, for, we are told, "Europe has reached the point where she will not buy as freely as she has of our goods, and domestic consumers have become wearied and exhausted by the constant and excessive demands made upon them in the form of high prices." And in Massachusetts, we are informed by the Springfield *Union*, "between fifty and a hundred shoe factories have closed down, and many others are running on a reduced basis."

On the other hand, B. C. Forbes, writing in the Philadelphia *Public Ledger*, declares that "the banking situation is sounder than it was at the beginning of January; immigrants are now arriving at the rate of fifty thousand a month; the whole railroad outlook is better than it has been in years; price-cutting has had a beneficial effect upon both the banking and mercantile situation, and the attitude of the new régime in Mexico is encouraging." *The Journal of Commerce* further interprets the report of the Board as being, not a cause for discouragement, "but a call to action," and the Washington *Post* thus summarizes the optimistic side of the report:

> "Labor is increasing in efficiency, which promises the increased production so urgently needed.
>
> "Loans for unessentials have been materially reduced, which is an important step in the process of deflation that will give additional buying power to the American dollar.
>
> "Speculation in commodities is reported to have been greatly reduced in many parts of the country, and in some parts practically eliminated.
>
> "Extravagant buying is less extreme and dangerous than it was some time ago.
>
> "From New York, the nation's financial center, come reports that the expansion of loans and rediscounts has been very largely checked, that production has continued at a very high level, and that business failures continue low.
>
> "Improved crop conditions are reported from all agricultural centers and there are prospects of bumper wheat and corn yields, despite decreased crop acreage.
>
> "An adequate supply of farm labor is available, indicating a trend back to the land from the industrial centers.
>
> "Live-stock conditions appear to be exceptionally good the country over.
>
> "Here and there, the Federal Reserve Board reports, there are flies in the ointment. The cotton and shoe industries are suffering from inactivity. Building is hampered by high prices of materials and heavy labor costs, together with transportation troubles and an inability to borrow money to finance contemplated projects, especially residential structures. But these

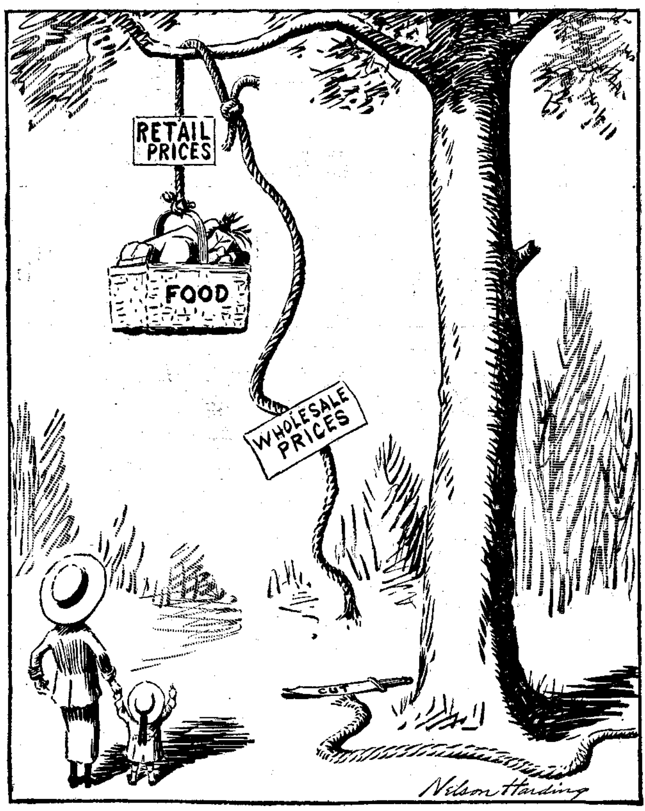
are details which merely serve to accentuate the excellent phases of the situation when considered in its larger aspects.

"The one great obstacle to complete industrial readjustment at present is transportation. Car shortage has reduced the fuel supply to a dangerous point. It, together with local labor troubles, is responsible for keeping the bituminous coal production down to about 9,000,000 tons a week, with current demands at 11,000,000 tons.

"It also has retarded the movement of grain to the milling centers. The shortage of cars has so seriously affected the iron and steel industry that it is a constant struggle to keep plants in operation and finished material moving. It is estimated that 2,000,000 tons of iron and steel are tied up in the hands of producers, for lack of shipping facilities. But reports are almost unanimous that orders for iron and steel are not being canceled, and buyers are persisting in their demands even under these discouraging conditions."

There is less complaint than usual of labor conditions on the Pacific coast, declares the report, and conditions generally are more stable than they were several months ago. "On the whole," thinks the Baltimore *News*, "the most sober and cautious estimate of prospects in all departments of national activity shows that the balance leans strongly to the right side." "Calamity-howlers are beginning to howl," agrees Governor Cox's paper, the Dayton *News*, "but the men who know conditions, and the agencies best equipped for ascertaining the truth, are confident that all is well."

"Those who are preaching 'panic' have failed to realize that we are sailing in a good, stout ship; that sail has been shortened, and that the gale has abated somewhat" is the way in which the editor of the New York *Commercial* puts it. Governor Harding, of the Federal Reserve Board, "probably the most conservative man in the country, not only by temperament but by virtue of his office," is then quoted as saying recently in New York:



IS THIS THE NEW THEORY OF GRAVITATION?

—Harding in the Brooklyn *Eagle*.

> "I am optimistic on the general situation. Do not misunderstand me, that I am predicting that all trouble is past. Nobody can say what the future will bring forth, but at the present time the outlook as I see it is good. So far liquidation of credits has followed wherever railroad congestion has been relieved, and this, I think, substantiates the contention of the Federal Reserve Board that the real trouble thus far this year has been physical and not financial."

Of the bumper crops in every section of the country which are predicted, and the probable effect upon the price of food, the Cleveland *News* says:

> "The abundance of food produced ought to work out its natural effects in some reduction of the cost of living. The changes in that direction which have begun in clothing, shoes, and a few other lines will help to widen the demand for merchandise because they will increase the buying power of consumers. Fewer young men are drifting about from place to place and job to job. Their restlessness is wearing off. They are taking life more seriously as workers.
>
> "These conditions are full of promise for the nation. They show that the country is sound at bottom and richer and more powerful, industrially, commercially, and financially, than ever before."

A SUPREME COURT FOR QUARRELING NATIONS

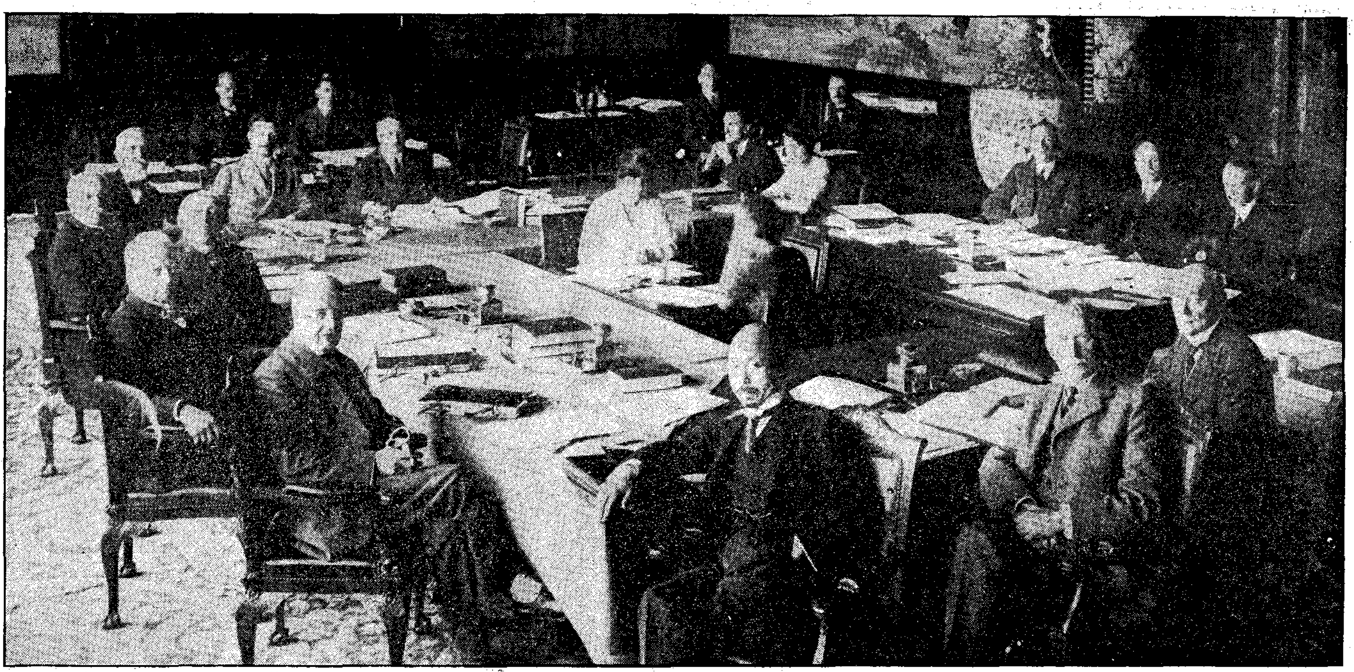
IF A "ROOT BRANCH," so to speak, can be grafted upon the Wilson League, the fruit of the tree will apparently be more to the taste of many Republicans who have been telling us not to touch or taste or handle it. One Republican editor finds the world-court plan devised by the aid of Mr. Root "really of greater importance than the League itself." Another admits that the plan may actually be "of greater importance than anything in the party platforms or anything yet said by the party leaders on the League of Nations." Pro-League Republican editors find here the means for American ratification of the Versailles Treaty under Republican auspices. Democrats, on the other hand, find it hard to reconcile Mr. Root's activities at The Hague with his party's official stand against the League. The Council of the League of Nations meeting at San Sebastian has now approved the so-called "Root plan" for a world court called for by Article XIV of the Covenant. Mr. Root accepted the Council's invitation to join its subcommission of jurists representing eleven other nations which are members of the League, and is credited with finding the way to overcome the difficulty of selecting judges. That was the rock upon which the court foundered at The Hague Conference of 1907, because no acceptable basis of representation for great and small Powers claiming equal sovereignty was then forthcoming. The subcommission's success in formulating at The Hague acceptable plans for the judicial branch of the League, as the New York *Journal of Commerce* expresses many opinions not influenced by party pronouncements, "is destined to prove one of the greatest steps toward the establishment of world peace ever made. Any future unity between nations must express itself in the form of international law rather than along the old lines of diplomacy and individual influence."

Mr. Root's part in reprojecting the court at this time excites peculiar comment, in view of the campaign controversy over the League, of which the United States is not a member. The Democratic New York *World* is somewhat sarcastic:

> "As the recognized author of the project of the High Court of International Justice and also of the plank of the Republican party on the League of Nations, it may seem difficult to reconcile Mr. Root's eminent services, first at Chicago and later at The Hague. No doubt he will be equal to the task, as he has been in so many emergencies. It is a situation that requires clearing up, if only for the relief of Republicans accustomed when in difficulties to look to Mr. Root for guidance. As a reward for his timely help at Chicago, is his contribution at The Hague toward the upbuilding of the League to be repudiated as un-American and intolerable?"

The Chicago *Post* (Ind. Rep.), however, says that Mr. Root is "wiser than many Americans who find nothing in the League but occasion for denunciation":

"He is not blind to its imperfections, but he is willing to take



Photograph from Henry Wales, Chicago "Tribune" Foreign News Service.

DEVISING A COURT OF JUSTICE FOR ALL THE NATIONS.

In the center is Mr. Adachi, of Japan; behind him Elihu Root and J. B. Scott, of the United States; and at the reader's left, in order, Lord Phillimore, of Great Britain; Dr. Loder, of Holland; Baron Descamps, of Belgium, chairman; Dr. Hagerup, of Norway; Raphael Altamira, of Spain; Ricci Bussatti, of Italy; and Mr. de la Pradelle, of France.

it as it is and use it to build better things for the world. While the cynical and the narrow-minded are emphasizing only weaknesses and perils—many of them illusory—Elihu Root gives his great, constructive mind to the League's opportunities. Senator Harding will do well to inform himself concerning Mr. Root's work. He is a better guide than either Lodge or Johnson."

The Springfield *Union* (Rep.) concludes that in setting up this judicial machinery which "only the League makes possible" and which America can not afford "either from a practical or moral point of view to repudiate or ignore," Mr. Root "is shaping the means for the inevitable participation of the United States through the ratification of the Treaty, whatever may be the discussion of an alleged issue in this campaign or the political results of it." Other Republican papers go so far as to assert, with the Omaha *Bee* (Rep.), that "this creation of the League of Nations is really of greater importance than the League itself, for, while the latter will deal with political questions chiefly and settle them on lines of expediency, the court will be devoted to the establishment of justice on a solid foundation of right."

In similar vein David Jayne Hill, before the New York State Republican Convention, condemned the League of Nations, but commended Mr. Root's efforts. Dr. Hill sees "the only hope of the League's utility for peace in a change of its center of gravity from a military to a judicial organization," and approves the establishment of a world tribunal "for the purpose of substituting in our relations with Europe judicial action for political expediency and military force." Such Republican emphasis, the Indianapolis *News* (Ind.) points out, fails to state the fact that it is the criticized Covenant which provides for the desired tribunal:

> "It was, however, recognized that there was at least a possibility that some nation might refuse to submit to the tribunal its controversy with another nation, and provision was made for that possibility. There can be no peace through a court unless disputants are willing to resort to that court. There must, therefore, be power to deal with such a case. That power is provided by the Covenant. But there never was any thought, and is not now, of substituting military force, the boycott, and the severing of diplomatic relations for the judgment of the proposed court. All these were and are supplementary. The nation that refuses to arbitrate, or to accept an award, must be dealt with in some other way. Mr. Root is acting under appointment from the League of Nations, which Mr. Hill condemns, and the court which he is helping to create will be an organ of that League."

The commission of jurists was appointed at the first session of the Council of the League under Article XIV of the Covenant, which reads:

> "The Council shall formulate and submit to the members of the League for adoption plans for the establishment of a Permanent Court of International Justice. The court shall be competent to hear and determine any dispute of an international character which the parties thereto submit to it. The court may also give an advisory opinion upon any dispute or question referred to it by the Council and the Assembly."

Cabled reports show that the commission recommends the establishment of the court at The Hague, outlines its competence and methods of procedure, as distinguished from the existing permanent Hague Court of Arbitration, and proposes international conferences and other measures for the development of international law. The court is to consist at the outset of eleven judges and four deputy judges. In consultation with judicial authorities in their respective nations the jurists of each nation now represented on the Hague Court of Arbitral Justice will nominate candidates for election by the Council and Assembly of the League. A majority vote of both bodies will elect. Failing to fill the court by such majority vote, a conference committee is to be appointed; if the Council and Assembly refuse to accept the conference committee's report, the judges already chosen may fill the vacant places.

The scope of this court is analogous to that of the United States Supreme Court in its adjudication of controversies between sovereign States of the Union. Dr. James Brown Scott, secretary of the Carnegie Foundation for International Peace (of which Mr. Root is president), and legal adviser to the American Peace Commission at Paris, cooperated with Mr. Root in formulating the plan now adopted on legalistic lines long advocated by them and by various organizations for the judicial settlement of international disputes.

In the proposed court the Los Angeles *Express* (Rep.) finds "another and unanswerable argument for American participation in the League which is as inevitable as it is compelling." "While President Wilson has uniformly depreciated the importance of a world court, and on more than one occasion shown distrust of it, it may easily become the key-stone of the peace structure."

The court plan, according to *The Rocky Mountain News* (Ind. Rep., Denver), is "probably of greater importance than anything in the party platforms or anything yet said by the party leaders on the League of Nations":

"In the Assembly of the League we have the common meeting-ground of the smaller states; in the Council the conference of the Great Powers. If each of these bodies selects a panel of jurists from which the personnel of the court is chosen by agreement between them, the closest approach that is humanly possible will be made to securing an impartial tribunal commanding the confidence of all."

But the Manchester (N. H.) *Union* (Ind. Rep.), in Senator Moses's State, is only more or less hopeful in "some such thing as this," to which "the Republican party is committed":

"How the nations acting through their representatives in the League Council and Assembly will take to the project remains to be seen. If those that are to-day carrying on aggressive war against almost defenseless peoples for the furtherance of their own imperialistic ends will submit to law, something may be accomplished. Anyhow, it is this or nothing. The desire for peace is the flimsiest of all foundations upon which to build a world society. Most nations want many things more than peace. Present possession is an insecure foundation upon which to erect a world-peace structure, even with an Article X binding the most powerful of the nations to maintain the *status quo*. World peace can not be maintained by a scheme of delay for purposes of arbitration on the basis of balanced charges and claims. None of the League projects or pledges goes to the root of the matter. When men, even for the most selfish of motives, are prepared to submit to laws to which they assent, they make and preserve states. When nations are prepared to abide by laws of their own making, they at least have a chance to make and maintain a working agreement making for peace."

TOPICS IN BRIEF

If one can't find a house he might sleep outdoors on some political bunk. —*Baltimore Sun.*

If you think there's nothing in a name, consider Warsaw.—*Greenville (S. C.) Piedmont.*

The modern son of toil shows little respect for his parent.—*Associated Editors (Chicago).*

At midnight in his guarded tent the Turk must be having another nightmare.—*Indianapolis Star.*

Europe's theory is that a good Samaritan always has something up his sleeve.—*Fargo Courier-News.*

What a pity that the fool-killer is not as much in evidence as the time-killer.—*Greenville (S. C.) Piedmont.*

"With all thy faults, I love thee still," seems to be a popular ditty with the moonshiners.—*Omaha World-Herald.*

Silk shirts don't tell the amount of a man's pile, but they tell you how long it will last.—*Associated Editors (Chicago).*

Apparently too many men nowadays are trying the experiment of running automobiles on alcohol.—*Boston Transcript.*

Still, it is hard to blame Jack Johnson for preferring jail in the United States to being at large in Mexico.—*Indianapolis Star.*

The Maine folks have had so much fun with their centennial that they are talking now of having one every little while.—*Boston Transcript.*

Of course the world is sympathetic, but there is a prevailing opinion that Poland made a home run on a foul. —*Associated Editors (Chicago).*

Despite the awful example furnished by the rest of the world, North and South China have decided to sign a peace treaty.—*Manila Bulletin.*

A brick loosened by the *temblor* in Los Angeles hit a fire-alarm box and turned in an alarm. Now they can call it a "fire."—*Omaha World-Herald.*

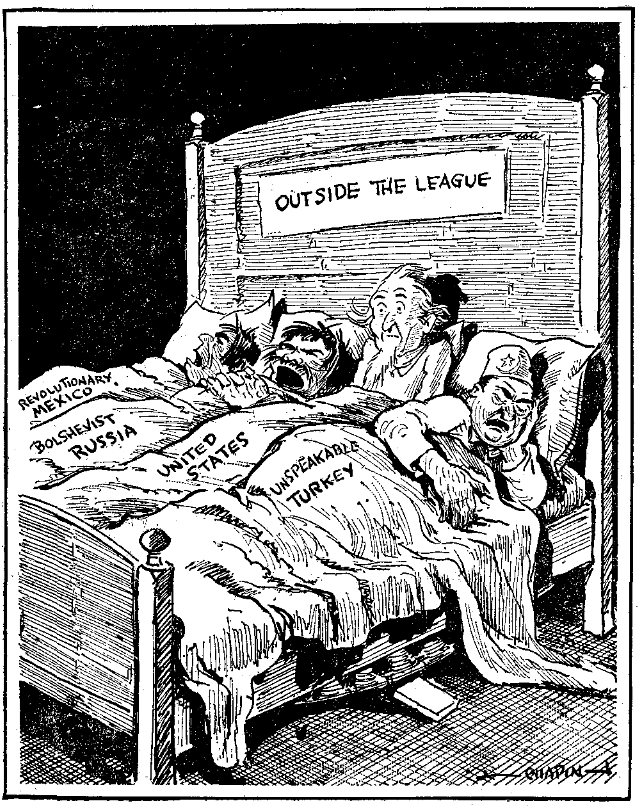
Governor Cox seems to feel certain he is going to be shocked at the size of the Republican campaign fund, unless the Democrats can raise a larger one. —*Indianapolis Star.*

General Wrangel wants to take part in all future conferences of premiers and government heads. If his name is any clue he ought to fit in perfectly.—*Pittsburg Dispatch.*

When the Prohibitionists assured Mr. Bryan that with his help they would sweep the country, what they had in mind was probably dry-cleaning. —*Philadelphia Public Ledger.*

If all the energy that is devoted to attempts to sell oil stocks were concentrated upon the digging of oil-wells there might soon be enough of good stocks to go around without pushing.—*Albany Journal.*

The mother of Parley P. Christensen, nominated for President by the new Farmer-Labor party, says he always was a bright boy. But probably not as bright a boy as Senator LaFollette, who declined the nomination.—*Kansas City Times.*



STRANGE BEDFELLOWS.

—Chapin in the St. Louis *Star.*

The laborer is worthy of his hire and the labor should be also.—*Greenville (S. C.) Piedmont.*

Now would be a good time for Marion, O., to demand a census recount. —*Kansas City Star.*

The Democrats intend to open the White House with a Jimmy.—*Greenville (S. C.) Piedmont.*

Germany is finding out that peace is priceless, and yet not price-less. —*Norfolk Virginian-Pilot.*

Once price was an indication of value; now it is an indication of nerve.—*Associated Editors (Chicago).*

About everything has been done now to relieve the situation except to dig the coal.—*Indianapolis Star.*

America's crops would be bigger if she had more men who want a place in the sun.—*Greenville (S. C.) Piedmont.*

Sorry, Sir Thomas, but the Eighteenth Amendment forbids lifting a cup in the United States.—*Norfolk Ledger-Dispatch.*

There is so little coming out of this investigation of A. Mitchell Palmer you'd think A. Mitch was conducting it.—*Detroit News.*

It is not at all doubted among the prohibition sleuths who do the seizing of the liquor that prohibition is a success.—*Washington Post.*

A French savant says the blond type will be extinct in 300 years. This dark prediction ignores the chemical industry.—*Newark Star-Eagle.*

Summed up, the opinion of leading American financiers is that if the country does not sink it will remain afloat. —*Indianapolis News.*

Roosevelt says if elected Vice-President he will get action out of the Senate. He must be a quite young man.—*Greenville (S. C.) Piedmont.*

The president of a pulp and paper company was attacked in his home by a masked burglar. Perhaps it was only a publisher bent on revenge.—*Columbia (S. C.) Record.*

One may safely assume that many of the people who are flocking to the battle-fields of France couldn't have been dragged there when the war was on.—*Philadelphia Public Ledger.*

Of course the immense increase in the population will result in an increase in the number of congressmen to be elected, but we can't have everything the way we want it.—*Cleveland Plain Dealer.*

An expert reports that the ouija board is increasing the number of patients in the New Jersey State asylums. But this is merely another instance of confusing the effect with the cause.—*Chicago Tribune.*

The toboggan erected and greased for the descent of prices several months ago is still waiting, and the few articles that did start down made that peculiar noise which indicated that most of the grease had dried up.—*Kansas City Star.*

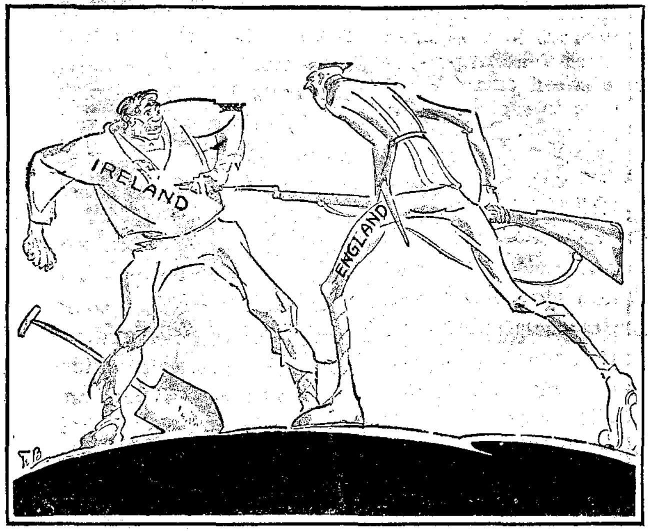
FOREIGN - COMMENT

International Photo.

A ROADSIDE SCENE IN IRELAND—BRITISH TOMMIES ON THE "IRISH FRONT"

ENGLAND'S "IRON HEEL" IN IRELAND

A SUMMER AND FALL of wide-spread bloodshed is predicted for Ireland if the British Government sweeps the country from end to end with military and police cordons, gathering up the leaders of the Sinn Fein and holding them through the exercise of what is practically martial law as provided by the drastic bill to restore order in the island. Yet there is every evidence, the cables say, that Lloyd George is determined to "fight Ireland," and more troops are being sent to the country constantly while soldiers are gradually replacing the constabulary, whose duties hitherto have been largely defensive. Little belief seems to be exprest that the establishment of martial law throughout the island will bring peace, for the Sinn Fein are considered too powerful and too well organized to be beaten at the game they are now playing. Yet the Irish are described as most unlikely to accept open battle or to stop demoralizing the constabulary. They are offering to find employment for constables who resign, and have the support of virtually all the railway men who refuse to operate trains carrying soldiers or munitions. They have enlisted thousands of ex-soldiers, many of them experienced officers, and they have spies everywhere in and out of Ireland, and also have large funds. But with all this power, it is said, they are far too weak to fight in the open, and they know it. Enforcement of the Premier's "drastic bill," it is predicted, will increase the amount of violence in Ireland, and it will also divide English opinion. The bill provides for the establishment of military courts even for the settlement of civil disputes, we learn from cable dispatches, and authorizes the trial, by juryless courts, not only of persons who may be arrested but of those now under arrest. The judge who presides need not necessarily be a military officer, but shall be appointed by the Lord Lieutenant from a list of eligibles approved by the Lord Chief Justice of England or the Lord Chancellor of Ireland. It is provided that the measure shall be effective in the whole or in any part of Ireland, and dispassionate critics say that "obviously this opens the way for excluding Ulster from its drastic provisions."



ENGLAND AND IRELAND.

"And I fought with you, at your side, for five long years, for the freedom of small nations!" —*De Notenkraker* (Amsterdam).

An intimate friend of Lloyd George, Mr. J. L. Garvin, editor of the London *Observer*, says the Premier is approaching the most critical period of his after-war career, and he points out the difficulties of trying to satisfy the demands of both the Liberals and Conservatives in the cases of Ireland and Russia. An important Liberal organ, the London *Westminster Gazette*, observes:

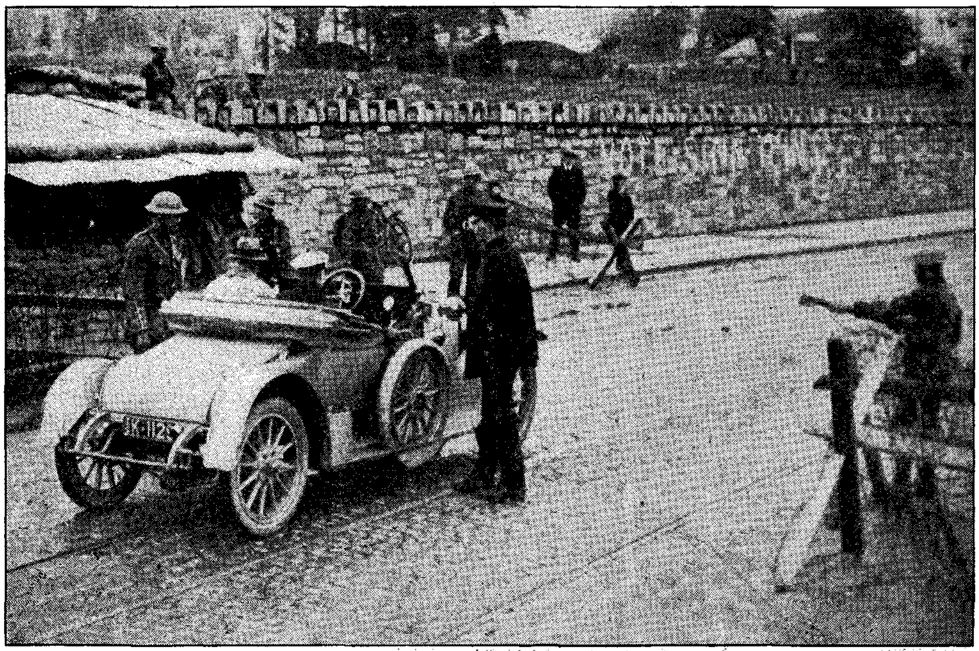
"The history of Ireland is a history of lost opportunities. It may be quite true, as the Prime Minister says, that the vast majority of Irishmen would repudiate the Home Rule Act of 1914 in the year 1920, but it is not less true that in the year 1914 the Nationalists of Ireland accepted it unanimously. Mr. Lloyd George now thinks that if it had been brought into operation in the year 1914, 'Nationalist Ireland would have treated it with contempt and scorn in time.' This is the familiar Unionist hypothesis about all Home Rule Bills, and it has been used with disastrous effect to prevent moderate settlements while there was yet time. What would have followed if the Act of 1914 had been put into operation can now be only a matter of conjecture, but one thing is not conjecture. The wrecking of that scheme has been the chief cause of the exasperation which now makes a moderate settlement impossible. Until we recognize this we are not at the beginning of wisdom on the Irish problem of to-day. Rightly or wrongly, the Irish have judged that the English are not playing fair with Home Rule. They saw the Act of 1914 made subject to the Ulster veto, they saw it bundled out of sight and smothered by conscription during the war, and they judge that the one operative clause in the Bill of 1920 is the repeal of the Act of 1914. They believe that the English people and English Governments are as indulgent to Ulster insurgency as they are stern against Nationalist rebellion, and they have persuaded themselves that they have no remedy but to make the government of Ireland by England impossible."

"Ireland is not only a nation but also a state," remarks the London *Nation*, which adds:

"We don't think that the average Englishman has the slightest conception of the strength of the movement that, according to Sir Edward Carson, has 'beaten the Government over three-fourths of Ireland.' He doesn't realize what it means that every County Council outside of Ulster should have transferred its allegiance from Westminster to the Irish republic. He doesn't understand that the republic is a successful fact—that while last year it was a republic besieged, this year it is the besieger."

The London *Daily Telegraph* realizes that Lloyd George has no alternative but to govern Ireland by what means he can, for—

"We have to recognize that the greater part of Ireland is in a state of open rebellion, and that the semblance of a Republican Government has been set up under an organized system of terrorism. It is supported by a section of the Civil Service, particularly the postal employees; it exercises a censorship over all correspondence; it has established its own postal service in Dublin, with Republican stamps and postmarks; it holds up railway communications as it wills; it has established its own 'courts of justice'; and it is exercising other functions of administration in the Southern and Western provinces, openly defying the real Government, and practising through its agents murder and other crimes on a wholesale scale. It is a misuse of language to refer to such developments as tho we were confronted with merely one of the frequent ebullitions of national feeling. On the contrary, the Nationalist Ireland of yesterday is in a state of rebellion, as open as that of the South when it decided to break away from the North and to smash the American Union, and it is not inappropriate in the light of the dramatic and deplorable incidents of the past few days to recall the Prime Minister's words uttered only a week ago. 'Lincoln,' he said, 'faced a million casualties and a five years' war rather than acknowledge the independence of the Southern States.'"



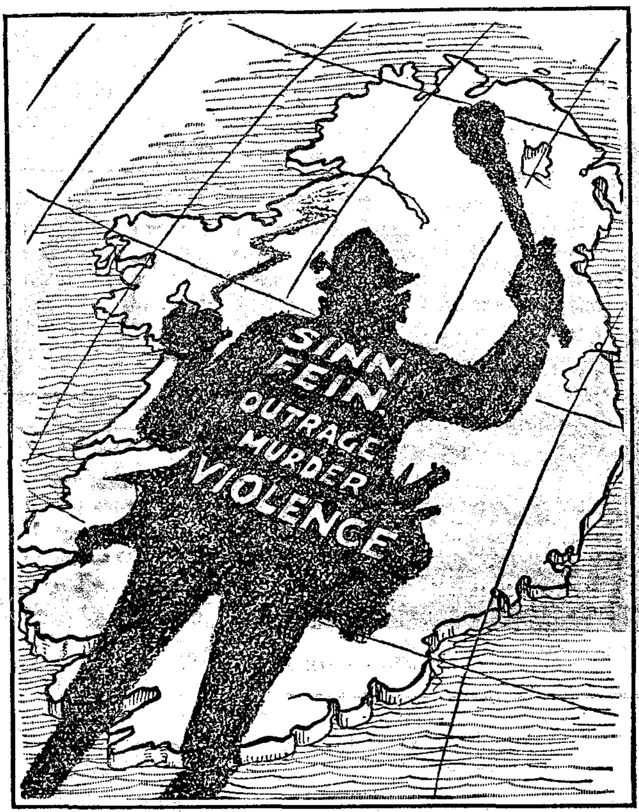
International Photo.

THE ROCKY ROAD TO DUBLIN.

Military guards examining travelers at one of the approaches to the city.

The Tory London *Morning Post* strongly supports the new policy of the Premier, which it thinks ought to have been inaugurated earlier, and it observes:

"Ireland is the outpost of England. If Ireland goes—and we can not say with any certainty that Ireland is not already lost



THE SHADOW.

—*Daily Express* (London).

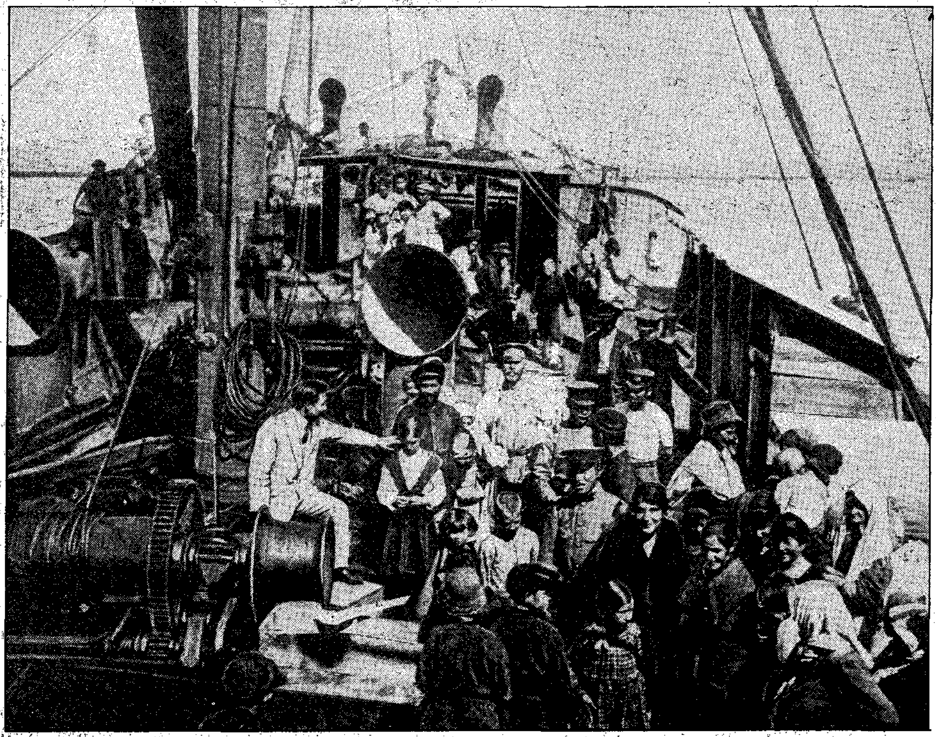
—the attack on this country will begin. The destruction of the British Empire is the declared Bolshevik purpose, and the weak point is first to be carried by assault while Bolshevik agents, in association with our revolutionary labor leaders, make ready in this country for the desperate adventure that they have so long been planning."

If the expectations of the British Government are realized, the effect of the "drastic" policy will be that the Sinn-Feiners will accept "either the pending or some other self-government proposal short of independence, even independence of a Platt-amendment order, or probably Dominion Home Rule with county option for Ulster." The present Home Rule Bill, we read in the Dublin *Irish Times* (Unionist), satisfies no one in Ireland, and this journal adds.

"If the Government has not passed the stage of warning, it ought to give the present Home Rule Bill a death-blow. It does not satisfy the Northern Unionists, and all of Nationalist Ireland is in arms against it. The Southern Unionists hate and fear it, so some of their chief representatives now are recorded. The whole of Irish opinion rejects the bill, and if it is enforced it will be enforced by an act as stupid and tyrannous as that which lost the American colonies."

IS JAPAN MAP-MAKING IN ASIA?

AMERICA'S PROTEST against Japan's seizure of the northern or Russian portion of the island of Saghalien is viewed in some quarters as a revelation of Japan's seeming aim to do some "fancy map-making in Asia while Europe is busy with pressing problems nearer home." Some cynics predicted, when the southern half of Saghalien Island was given to Japan in settlement of issues arising out of the Russo-Japanese War, that the Japanese would ultimately have the entire island, a most desirable acquisition for Japan. The announcement of the occupation of the upper half of the island, with additional strong military forces in Siberia, which should be free to operate against the Bolsheviki, followed the killing of seven hundred Japanese by Bolsheviki and the Partizans at Nikolaievsk on May 24. The United States Government is concerned also, we learn, about the "buffer-states" idea fostered in Japan for the purpose of holding back the Bolsheviki, and some Tokyo dispatches indicate that the "buffer" area is not confined to a generous slice of eastern Siberia, but includes most of the Chinese province of Manchuria. Much indignation and suspicion of the United States appear in that section of the Japanese press which backs the Government to the limit in its reprisal for the killings at Nikolaievsk. Among such journals is the Tokyo *Yorodzu*, which thinks that "even if the whole territory east of Baikal is not to be occupied, Nikolaievsk should certainly be occupied, together with the places forming a link between that port and Japan." North Saghalien should be occupied above all, because "there are two hundred Russians there, and if they become Bolshevized it will be a serious menace to South Saghalien. Moreover, there is no knowing what plots may be hatched by the Partizans." And then this journal takes a slap at America in the following remark:



Adachi Photo.

JAPAN WINNING HER WAY WITH THE RUSSIANS.

Russian refugees from Nikolaievsk who were saved from the blood and fire of the Bolsheviki, aboard a Japanese transport, *Tamon Maru*, which is taking them to the port of Otaru.

"Fearing that Japan may take drastic measures, in view of the great indignation of her people, some Americans in the Far East are holding the Japanese militarists responsible for the Nikolaievsk incident, instead of attacking the Bolsheviki and the Partizans, and are carrying on a vigorous propaganda with the intention of causing internal strife in Japan. Americans are wont to adopt such tactics. By these means they have caused disturbances in China and instigated Koreans, and have enabled the revolutionary movement in Mexico to succeed. Will the Japanese fall into the trap? It is true that the militarists should be attacked, but this is no reason why we should tolerate the barbarities of the Bolsheviki and the Partizans. Unlike China and Mexico, Japan will not submit to the interference of America. However serious domestic problems there may be, the Japanese can at any moment combine to tackle external questions. Remedial steps regarding the Nikolaievsk incident should be taken at once. Take note that the American activities are part of the plan for the realization of an ambition to annex Asia."

In the Tokyo *Yamato* Professor Nakashima also attacks America bitterly with the familiar charge that Americans are "instigating Chinese and Koreans, while others are taking extreme steps to instigate the Irish independence agitators in America." The honor of the country and the civilization of humanity are at stake in the reprisal for the Nikolaievsk "massacre," according to this fiery professor, who warns his fellow countrymen that—

"We can not be too cautious of America's attitude. In the past the world had to guard itself against the aggression of Germany and Russia. The world must now be on its guard against the irresponsible attitude of America, instead of against Bolshevism. At this juncture the Japanese should establish a national policy with a great determination for the sake of the world's civilization. It is not the time for us to indulge in petty party strife."

Less rabid against America but equally strong in its conviction that Japan must pursue a "forward policy" is the *Chugai Shogyo*, which observes:

"The Nikolaievsk massacre is a great problem for the whole world, and in the light of the principle of justice and humanity its importance should not be overlooked. America declared war on Germany because of the destruction of the *Lusitania* by a German submarine, while the violation of Belgium's neutrality by Germany was responsible for the declaration of war by Great Britain. If the Nikolaievsk incident is viewed in the same light as the acts of Germany, it is by no means too much to say that it is a problem for the whole world. Why should the Japanese Government hesitate to start military operations in Siberia, where a state of anarchy reigns, and to occupy certain places in order to safeguard the interests of this country?"

How widely Japanese opinion varies may be judged by a comparison of the foregoing opinions with that of the Osaka *Asahi*, which says that after having read and reread the military and naval official *communiqué* regarding the Nikolaievsk "incident," it regrets that it can not believe the authorities took all possible steps to rescue the Japanese at that point. The *communiqué* shows that the situation in Far Eastern Siberia has gradually become worse since the winter of 1919, and "if the authorities were solicitous of the safety of the Japanese residents, they ought to have arranged for the withdrawal of the people," or if they were to stay, "a far larger garrison than two companies of infantry should have been stationed there." The *Asahi* continues:

"We are second to none in sympathizing with the Japanese

Adachi Photo.

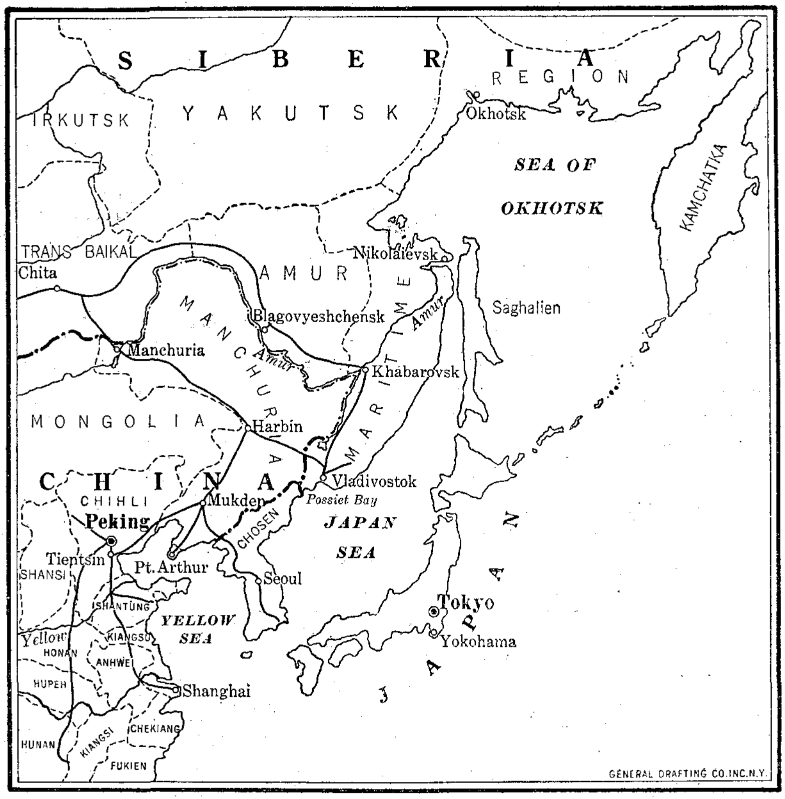
A TRIBUTE TO THE VICTIMS OF NIKOLAIEVSK.

A memorial meeting at Vladivostok where General Oi read an address to the spirits of those who were murdered by the Bolsheviki. The crowd of mourners remain far back from the space in which stand tables bearing votive offerings to the dead.

victims and their families, but questions relating to condolence, responsibility, and remedial steps should be considered separately. The people should be cool-headed and careful not to be misled by the militarists who are trying to inflame popular indignation and vindictiveness and to shift their responsibility to some one else."

Somewhat similar in tone is the criticism of the Osaka *Mainichi*, which says that the *communiqué* makes it clear that it is "irrational" to use the word "massacre" in regard to the Japanese soldiers killed in Nikolaievsk, and this journal adds:

"The Japanese garrison engaged the Bolsheviki. The Japanese fought against overwhelming odds, and the heroic manner in which they died redounds to their military fame, but we should not say that they were 'massacred,' and the military authorities should not be absolved from responsibility. It is true that the Japanese civilians were massacred by the Bolsheviki, but the term 'massacre' can not be used in regard to the soldiers. It seems that the Government is trying to appeal to the vindictive sentiment of the people by making much of the term 'massacre.' We should clearly distinguish between massacre and defeat and make the responsibility of the authorities clear."


S I B E R I A
REGION
IRKUTSK
YAKUTSK
Okhotsk
SEA OF
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TRANS BAIKAL
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Nikolaievsk
Amur
MARITIME
Saghalien
MANCHURIA
Blagovyeshchensk
Manchuria
Amur
Khabarovsk
MONGOLIA
Harbin
CHINA
Vladivostok
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Pt. Arthur
Seoul
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WHERE JAPAN GETS ON IN SIBERIA.

Besides occupying the northern or Russian half of Saghalien, Japan holds Khabarovsk as an outpost of Vladivostok, it is said, and as giving Japan control over the whole of the Maritime Province south of the Sea of Okhotsk. For the same reason the Japanese are in Possiet Bay. For a buffer state, it is said, Japan's aim comprises a generous slice of eastern Siberia and most of Manchuria.

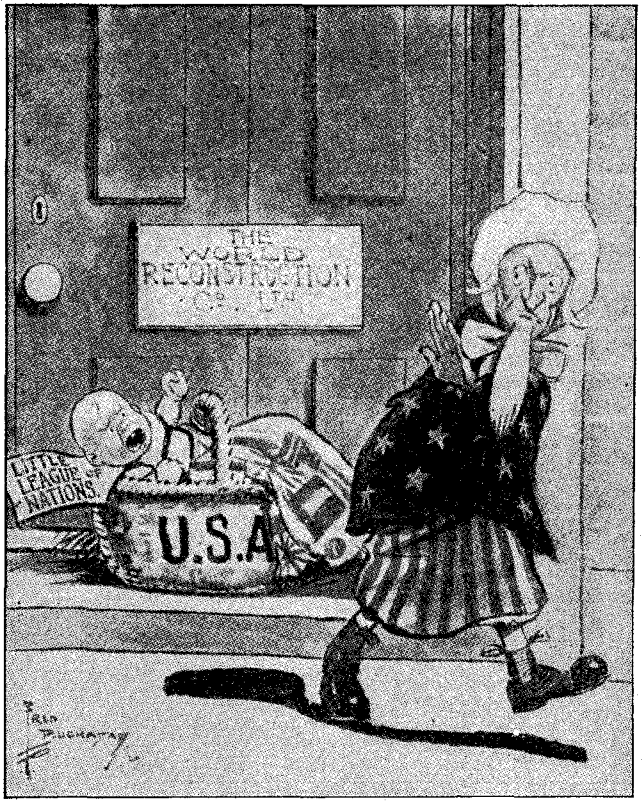
The Tokyo *Japan Advertiser*, an English-language newspaper, considers that the occupation of the northern half of Saghalien, until Russia possesses a "legitimate Government," as security for reparation for the loss of Japanese lives at Nikolaievsk, is not an excessive action or, "according to present international standards, anything but exceedingly moderate," even if we assume at once that Japan proposes to retain the northern half of the island permanently. But, this daily argues, the Russians are not anxious about Saghalien nor is the rest of the world, for the occupation of the island is the "least important aspect" of the Siberian policy outlined by Japan's Foreign Minister, Viscount Uchida. He announced, we are told, that the Japanese forces would be withdrawn from Chita because the Czechs have left and the hostilities between the Russian factions have ceased. But the question can not be understood in territorial terms alone, declares *The Japan Advertiser*, which points out that—

"Chita is only important because it covers the junction of the Siberian Northern Railway and the Chinese Eastern Railway. The latter is the real link between eastern Asia and northern Europe. For a true understanding of Japan's policy we must therefore have some knowledge of her intentions regarding this vital link. The line is now under the virtual control of Japan.

"While evacuating Chita, Japan retains a considerable measure of control of the Northern Railway by keeping a garrison at Khabarovsk. The reason given by the Foreign Minister is that Khabarovsk is a point of strategic importance on the way to Saghalien. But Saghalien is an island and the nearest port, Nikolaievsk, is separated from Khabarovsk by many miles of railless country. Holding Khabarovsk, the Japanese Army was unable to prevent the massacre at Nikolaievsk. How, then, can Khabarovsk have any connection with the safety of the Japanese garrison in Saghalien? It can only be held as an outpost to Vladivostok and as giving Japan control over the whole of the Maritime Province south of the Sea of Okhotsk."

WORLD INTEREST IN OUR ELECTION

AMERICA'S PRESIDENTIAL ELECTION holds the center of the stage in the news and interest of the world, not only in Europe, but in the Far East, and this fact is most illuminative of changed world conditions, says the Yokohama *Japan Gazette*, which describes the great family of nations as "waiting for America" because the interest of one and all is bound up in the greatest single international issue ever known, namely, the League of Nations. True, other issues are before the American electorate, but the paramount foreign issue is undoubtedly the League, "because so much, for the foreign world, depends upon American participation and the nature of that participation," and this journal proceeds:



"THE FOUNDLING."

—*The Bystander* (London).

"It is not too much to say that most of the international unrest now existing throughout Europe, Asia, and Africa may be justly traced to the suspense created by America's delay in ratifying the Treaty of Versailles. The experts do not doubt for a moment that the United States will ratify the Treaty in its own way and time, but its abstention has confused and weakened international policies everywhere. The other day Mr. Lloyd George, the British Premier, stated that nothing definite could be done about the formal renewal of the Anglo-Japanese Alliance until after the result of the American elections was assured—in fact, until after March 4 next, when the American President is inaugurated. This is typical of the international suspense. Until this question of the Alliance is settled, Japan's policy must be conducted on the most cautious lines, and to-day, as a result, we have her placing before the Diet a budget unprecedented for the volume of its defense appropriations. Similarly, Japan can not know how the Allies will deal with Russia until after it has been decided whether America will join the League to maintain peace throughout the world, for the European Allies are not prepared to enforce their will by arms in that country, so that Japan must remain heavily armed and ready to act single-handed if required."

All this may be traced to uncertainty as to America's course toward the League, we are told, and because of the League's weakness without America the forces of anarchy and disorder are everywhere rearing a menacing head. All these forces, which can be kept within bounds only by law strongly administered, are "finding the law imposed by the Allies hollow and weak." There is no restraining force behind it because "there is no true unanimity," and *The Japan Gazette* explains:

"The Council legislates and the League organizes, but both lack that concentrated will and power to enforce it which alone constitute good and effective government. The lack of it is even evidenced in the divisions constantly occurring between the European Allies in respect to Turkey and Germany. America was to guarantee France, and, failing her, France has to fall back on Great Britain and Italy, but neither of these Powers is in a position alone to go to the limit in guaranties to which they would be willing to go were America a coguarantor. Thus there are constant complaints and much irresponsible recrimination, which is dangerous inasmuch as it is largely absorbed by the irresponsible but sensitive masses."

Enemy propagandists seize upon this international irritation to widen the Allied international ranks, and thus we come to the "chief vicious weakness" of the world situation to-day, which is that—

"There is no single central leadership, there is no common ground of principle. There is no general doctrine of world reorganization, and no Allied policy of combined wisdom and strength, such as a representative League of Nations could supply. And there can be no representative League of Nations until the United States joins one whole-heartedly, nor can that participation take place until the American people have pronounced in its favor. This is the reason why these American elections are holding the center of the stage in the news and in the interest of the world."

A FRENCH TRIBUTE TO UNCLE SAM

AMERICA'S FRIENDSHIP FOR FRANCE is not a mere form of expression, but a wonderful fact that France should realize keenly, says Mr. Stephane Lauzanne in his influential Paris daily, *Le Matin*. During the war America lent France $3,000,000,000, he reminds his fellow countrymen, and to-day, according to the value of the dollar, France owes the United States 36,000,000,000 francs. This money was lent to France at various rates of interest—to be precise, at the rate paid by the United States in borrowing it from her citizens, and it averages about 4½ per cent. The result is that France to-day should pay annually to America in interest exactly 1,620,000,000 francs. Mr. Lauzanne proceeds:

"Until now we have not paid one centime of interest on this debt of $3,000,000,000, and the United States Treasury has informed our Ambassador at Washington that in order to help us in our exceeding difficulties no interest will be required of us for three years to come. Looking at this thing closely, we find that there is from seven to eight billion francs that will not be required of the French, but will be required of the Americans, because if one does not pay the other must pay. I call this a touching example of American friendship, which is so generous, so disinterested, and so profound that it is a matter of constant public notice. This friendship is truly a brotherly one, because after all does not brotherhood mean taking on one's shoulders the part of the burden that one's brother is unable to carry? This expression of friendship is marked also by delicate charm, for the present of seven or eight billion francs was made without the slightest ostentation or publicity. Let France look about her in the world and judge whether there are many nations who would have been similarly generous. Let her ask herself whether she would have done as much in the same case—and without talking about it.

"But it will be said, what about the pact of guaranty by virtue of which America and England shall come to our aid if we are again attacked? England has ratified the pact, but a year has passed, and America has not ratified it. Granted that the pact has not been ratified by the American Senate, and let me tell you the reason is that the Treaty tinkers were stupid and clumsy enough to tie it up to the League of Nations, with which the American Senate will have nothing to do. But at the same time it should be positively known in France that all the Senators, without distinction of party, have declared both publicly and privately that "if the pact of guaranty were detached from the League of Nations we would vote for it in five minutes by acclamation."

SCIENCE - AND - INVENTION

WHAT TO EAT IN HOT WEATHER

DO YOU ENJOY HEAT? No? Then why not try to cool off? We do try, and try hard; but some of us don't know how. There are the heat-producing foods, for example; excellent things in winter—calculated to save the lives of the Eskimos, but hardly what one ought to choose for a meal with the thermometer in the 90's. Yet how many of us know what they are, so that we may avoid them; and how many of us care to know? C. Houston Goudiss puts the case strikingly in an article on "Foods That Cool," in *The People's Home Journal* (July-August). Mr. Goudiss notes that in summer we often see automobile-drivers bring their cars to a stop and get out to see if the engine is too hot. No one thinks of this as unusual. But the same man will alight at a hotel or restaurant, doff his duster, wash his hands and face, and proceed to injure his own human machinery in just such measure as he has tried to protect that of his car. To quote Mr. Goudiss's words:

"With a meal of heavy foods, rich enough in fat- and energy-producing elements to satisfy the winter needs of a dweller in the far north, he will endanger not only his personal comfort on this summer day, but also his physical and mental efficiency.

"Compared to the engine in his body, the engine in his waiting car is a crude, rough affair that can stand no end of punishment. Indeed, the watch he carries in his pocket is not so delicately constructed and sensitively balanced as his own digestive machinery—his stomach and intestines.

"Yet does he stop on a hot summer day to think about this machinery; to consider whether or not the food he eats (the fuel by which it is run) is overheating it; whether or not this food is suited to the immediate needs of this most delicate machinery?

"In nine cases out of ten he does not.

"In nine cases out of ten, men, women, and children never stop to think that the excessive heat of summer necessitates strict attention to diet, and that this attention not only pays immediate and large dividends in health, but is the real secret of keeping cool in hot weather.

"We eat food for five main reasons—for heat, energy, blood-regulation, tissue-building, and repair, and the maintenance of that marvelous balance between the working of the vital organs. The temperature of the body in health is the same in summer as in winter. But the work of the body machinery is different in several ways.

"In the first place, elimination of moisture is much more constant and noticeable in summer than in winter. That is why thirst is so prevalent during hot weather. And when we come to a consideration of thirst, we approach one of the main causes for summer discomfort.

"With the thermometer in the 90's and little or no air stirring, with the mind intent upon the wilting effect of the humid atmosphere and the body wearied by its attempt to overcome the fatigue incident to such conditions, nothing seems more tempting than an iced drink. Before you lift the frosted glass to your lips—and this applies to any liquid from water to ice-cream soda—let me ask if you ever noticed a pan of potatoes or prunes or any other foodstuff boiling low and, to prevent burning, poured in some cold water?

"If so, you saw how quickly the boiling ceased; and it was some moments before the bubbles came back.

"Now the food in your stomach does not boil or bubble, but it is constantly kept in motion so the digestive juices may become thoroughly mixt with it, and this preparation for the real process of digestion and assimilation in the intestines is carried on at an even temperature—between 98 and 99° Fahr. Save for the degree of heat, the comparison with the pan of boiling food is not inapt. As you swallow mouthful after mouthful of the ice-cold liquid, you do to your stomach exactly what the cold water does to the boiling liquid in the pan—you chill its action and halt its function.

"It is necessary to drink more in summer than in winter, but no iced liquid ever should be allowed to enter the stomach, and all cool drinks should be slowly sipped. One real hot-weather danger is the tendency of the kidneys to neglect their work because of excessive perspiration which carries off the body moisture. But perspiration does not perform the function of the kidneys in eliminating poisons, and as warm drinks are kidney-stimulators, it is unwise to neglect altogether their use during hot weather. In fact, large quantities of water should be taken *to supply sufficient for body-evaporation and to keep the kidneys* active."

The real cooling influence of any summer drink, Mr. Goudiss reminds us, is its power to increase elimination of moisture and thus, through evaporation, keep the surface of the body cool. Hence the wisdom of partaking only of drinks whose temperature is such as to hasten rather than hinder the process of *digestion. He continues in substance:*

"I have emphasized drinks because they are the first food we think about in summer. If you want to quench your thirst in summer without unduly heating your blood, stick to cool water—varied, if you choose, with a little lemon, orange, lime, or other fruit juice.

"Most persons eat too much meat the year round. What the body does not need for building and repairing tissue must be taken care of, and this excess is burned as fuel, and therefore creates more heat.

"Use meat as a flavor and you have its ideal summer service. Use milk in place of meat and you lay the foundation for a degree of summer comfort such as you have never known.

"With eggs, cheese, and fish, milk completes a list of perfect meat-substitutes for summer use.

"As a general rule we need only about three-fourths as much food in summer as in winter. And since there are foods which will keep the body *machinery going* without *overheating it*, why not use them?"

If the man at the head of the table must have meat, says Mr. Goudiss, satisfy his longing with a bit of cold ham or tongue, a piece of chicken or a small chop, a slice of veal loaf or some jellied meat. At the same time, surround him with a tempting array of fresh vegetables, an enticing salad, and a dish of fruit. Moreover:

"As they come along, serve him plentifully with asparagus, carrots, beets, Swiss chard, peas, spinach, string-beans, corn, onions, lima beans, tomatoes, cucumbers, and eggplant. Some of these may be cooked with a bit of meat, thus adding to the flavor. And many of them will provide a generous portion of those necessary food elements, vitamins.

"I know homes in which salads and cereals form the chief item of diet during the summer months and in which meat is almost wholly ignored. It is a fact that in these homes I hear less complaint about the heat, less insistence on weather topics, than any place I go.

"The folk who live in them eat plentifully of fruit in summer. When it comes to desserts they emphasize gelatine dishes, tapioca and cornstarch puddings, frozen-milk sherbets, water-ices, and plain ice-creams.

Pure, plain ice-cream is a very nourishing food if eaten slowly. But to dump a dish of frozen cream into the stomach on top of a warm meal which already is being prepared for digestion is to throw a monkey-wrench into the works. The stomach must draw on the rest of the body for reserve power to raise the temperature of the chilly mass to that of the blood.

"The way you feel in summer is dependent first upon the way you eat. If you are going to insist upon food which will add to your body satisfaction or overtax your body machinery you will suffer. But if you will keep your mind calm and your head out of the sun, eat little meat and avoid a surplus of sweet, fizzy drinks, get sufficient sleep and waste no time talking, thinking, or reading about the heat, you will have little cause for complaint."

OPENING THE GATE OF THE GREAT LAKES

THE INTEREST OF THE GREAT LAKES CITIES in the St. Lawrence navigation project is evident when we realize, as we are told by *Power Plant Engineering* (Chicago), that all points on Lakes Erie and Ontario are 250 miles farther from Liverpool *via* New York than by way of the St. Lawrence. When ocean-going vessels can dock at Cleveland or Detroit there is little doubt which route these towns will use. New York may not like it, but the cities on the Great Lakes may be excused for thinking that the interests of New York and that of the United States in general are not, in this instance at least, necessarily identical. The enterprise must be an international one, of course, and will benefit Canada as well as our own country. Incidentally it will develop a huge amount of power, at least half of which will be our share, to operate railroads and factories throughout northern New York State and parts of New England. The writer of the article cited thinks that the project will save us 100,000,000 tons of coal a year besides some $18,000,000 on the transportation of wheat alone. We read:

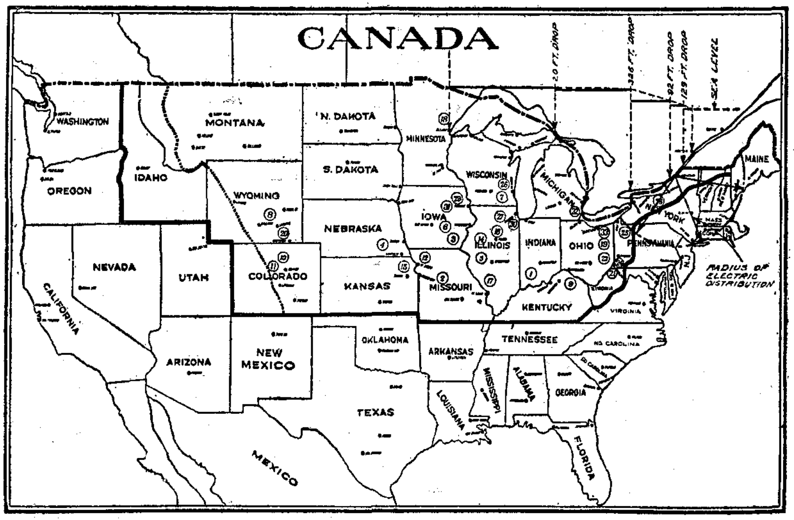

CANADA
WASHINGTON
OREGON
IDAHO
MONTANA
WYOMING
N. DAKOTA
S. DAKOTA
MINNESOTA
WISCONSIN
NEBRASKA
IOWA
ILLINOIS
INDIANA
OHIO
MICHIGAN
NEW YORK
PENNSYLVANIA
MAINE
MASS
CONN
N.J.
NEVADA
UTAH
COLORADO
KANSAS
MISSOURI
KENTUCKY
VIRGINIA
CALIFORNIA
ARIZONA
NEW MEXICO
OKLAHOMA
ARKANSAS
TENNESSEE
NO. CAROLINA
SO. CAROLINA
GEORGIA
ALABAMA
MISSISSIPPI
LOUISIANA
TEXAS
FLORIDA
MEXICO
20 FT. DROP
336 FT. DROP
92 FT. DROP
129 FT. DROP
SEA LEVEL
RADIUS OF ELECTRIC DISTRIBUTION

FIG. 1.—MAP SHOWING THE PRODUCTION CENTERS, ELEVATIONS AFFECTING THE ST. LAWRENCE RIVER PROJECT, AND THE RADIUS OF POWER DISTRIBUTION.

"The economic significance of the States bordering upon or tributary to the Great Lakes is seldom realized by the people of other divisions of the country. Horace C. Gardner, who is president of the Great Lakes-St. Lawrence Tidewater Association, has furnished us with the map shown in Fig. 1. Let us turn to this map and follow the heavy black line beginning on the boundary between Maine and New Hampshire to the dotted line, beginning at the lower central part of Colorado, and then follow this dotted line to the Canadian border.

"The territory included between the line just described and the Canadian border is correctly called the heart of our country. It embraces something more than a third of our territory with more than a third of the population and more than a third of the wealth. Potentially, this heart of the country is probably more than half of the whole country.

"According to the latest figures available, its present productivity may be stated as follows, in terms of percentages of the total: Corn production, 65 per cent.; apples, 21 per cent.; cattle, over 50 per cent.; hogs, 57 per cent.; butter, 54 per cent.; eggs, 54 per cent.; coal mined, 36 per cent.; copper, 39 per cent.; lead, 46 per cent.; wheat production, 74 per cent.; flax production, practically 100 per cent.; beet sugar, 53 per cent.; horses, 60 per cent.; wool, 47 per cent.; cheese, 57 per cent.; iron ore, 85 per cent.; coal reserves, 72 per cent.; zinc, 74 per cent. . . . . . .

"And yet with all this potential and actual wealth we are sufferers and have been for many weeks and months. Our business and all of our activities are hampered for lack of transportation.

"A study of figures showing our exportations of grain and heavy freight shows that if we could load vessels directly at the ports of the Great Lakes and ship thence without breaking bulk to European ports, practically all of the excessive peak load could be absorbed and incidentally a tremendous car mileage could be avoided as well. The diagram (Fig. 2) taken from Robert G. Skerrett's article in *The Scientific American* shows the congestion caused by the 'bottle neck' effect of our Eastern railroads in the transportation of our wheat.

"The real remedy for our freight blockade would seem to be to open the Great Lakes so that ocean-going vessels may freely enter and make use of various ports, at many of which our railway systems already center.

"The cost of this splendid project would be trifling in comparison with the immediate and prospective benefits to be realized. The present scheme for deepening the St. Lawrence would be a joint Canadian and American effort. Canada has already taken into her own hands the construction of a new Welland Canal across the Niagara Peninsula, . . . and it is expected this canal will be finished in three years. It will be adequate for the typical ocean freighter of to-day.

"What about the St. Lawrence rapids? How can they be avoided or what may be done to enable vessels to come up and use the new Welland Canal? It is proposed, by constructing a series of great dams, to drown out the rapids, thus converting them into lakes. Locks would be put in to enable vessels of any size desired to pass. This method will possess the further great advantage of developing a tremendous amount of electrical power."

To the American mind, of course, very naturally comes the query, Why the St. Lawrence? Why not an all-American route up the Hudson and into Lake Ontario? The writer sees several good reasons for favoring the St. Lawrence. In the first place, nature shaped the course of the St. Lawrence so that it runs from the heart of the North American continent directly toward the principal ports of Europe. The map opposite shows, as well as a surface can, this relationship not only of the St. Lawrence but of our entire Atlantic coast to the Atlantic coast of Europe. He continues:

"Rochester is nearer to Liverpool than is New York. Buffalo is but a few miles farther. From all our ports on Lakes Ontario and Erie, it is 250 miles farther to Liverpool, London, and northern French ports and all North Sea ports via New York than via the St. Lawrence. It is evident, therefore, that the distance is in favor of the St. Lawrence route.

"Another tremendous advantage is the power. The normal mean flow of the St. Lawrence at its outlet from Lake Ontario is 240,000 second-feet. There is between the head of the rapids near Ogdensburg, N. Y., and the foot of the lowest rapid just at the City of Montreal a total fall of 221 feet. . . . . .

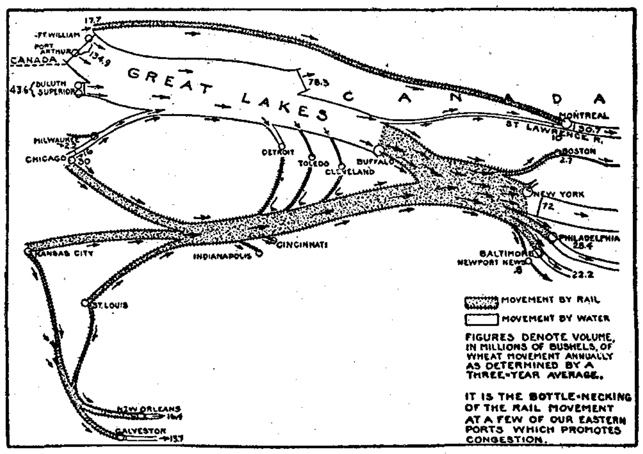

FT. WILLIAM
PORT ARTHUR
CANADA
17.7
134.9
43.6
DULUTH
SUPERIOR
GREAT LAKES
78.5
CANADA
MONTREAL
ST. LAWRENCE R.
30.7
10
BOSTON
2.7
MILWAUKEE
2.3
CHICAGO
16
30
DETROIT
TOLEDO
CLEVELAND
BUFFALO
NEW YORK
72
PHILADELPHIA
28.4
BALTIMORE
NEWPORT NEWS
.6
22.2
KANSAS CITY
INDIANAPOLIS
CINCINNATI
ST. LOUIS
NEW ORLEANS
16.4
GALVESTON
13.7
MOVEMENT BY RAIL
MOVEMENT BY WATER
FIGURES DENOTE VOLUME, IN MILLIONS OF BUSHELS, OF WHEAT MOVEMENT ANNUALLY AS DETERMINED BY A THREE-YEAR AVERAGE.
IT IS THE BOTTLE-NECKING OF THE RAIL MOVEMENT AT A FEW OF OUR EASTERN PORTS WHICH PROMOTES CONGESTION.

FIG. 2.—SCHEMATIC CHART OF THE MOVEMENT OF WHEAT VIA THE GREAT LAKES AND THE RAILROADS TO THE ATLANTIC SEABOARD AND ABROAD, SHOWING HOW RAILROAD TROUBLES HAMPER THE PROBLEM.

The question of the control of the flow of the St. Lawrence will no doubt be merged with the improvement of the river for navigation and power. . . . . .

"If 70 per cent. of the power can be realized, the development would amount to over four million horse-power. The first 113 miles of the river from its outlet from Lake Ontario is international—that is, it constitutes the boundary between the two countries. The fall in this section, confined to about forty-two miles, is ninety-two feet; the power possibilities of this section on the same basis would be practically one and two-third million horse-power. Normally one-half of this would be Canadian and one-half United States. It would seem, therefore, that the minimum power that may be developed from the St. Lawrence and distributed through northern New York and New England would be eight hundred thousand horse-power. It is not unlikely, however, that in the final bargaining between the two countries the United States may assume some of the expense of improvement below the international section of the river and in return receive more power. We would have the demand, or, at any rate, within a short period would grow to have, and the need in Canada is relatively much less.

"The possibilities of this enormous increment of power and its distribution for railroad and other industrial purposes throughout New York and New England can be appreciated. All of the New York Central Railroad system north and west of Albany might be electrified. If the power available proved more than adequate, it could be transmitted to greater distances, even as far as New York. This source of power could be made part of the proposed superpower zone advocated in the eastern industrial district. . . . . . .

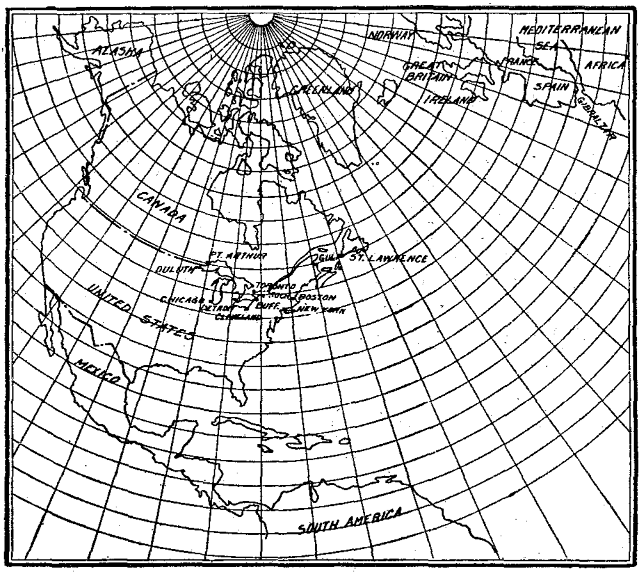


FIG. 3.—CHART SHOWING HOW DISTANCE FAVORS THE ST. LAWRENCE.

"Considered internationally, the saving on the full four million horse-power would amount to one hundred million tons of coal a year. Furthermore, how many miners are required to mine, say, fifty million tons of coal, and how many mine laborers and others in and about the mine? How many railway employees would be necessary to transport the coal?

"The problem has many ramifications, but look in whatever direction you may, you see the possibility of a substantial saving, and in the aggregate the improvement of the St. Lawrence will be amply justified if considered as a conservation measure only."

A TELEPHONE CENSUS—Nowhere else in the world have the telephone and the automobile been so popularized as in the United States, we read in a Boston dispatch to *The Wall Street Journal.* Attention is called to statistics prepared by the American Telephone and Telegraph Company which reveal "some truly surprizing increases in the number of telephones per one hundred population in the principal cities of the country." Altho the comparison is based on the censuses of 1910 and 1920, the figures will not always agree with those reported in the census statements. This is because the telephone areas in many cases include places other than the city after which they are named, and the population and telephones in these outlying places have, of course, been included. As *The Wall Street Journal* presents the table:

City	*Population of Telephone Area*	*Number of Telephones*	*Telephones per 100 Population*	
			Jan. 1,'21	*June 1,'10*
New York	5,621,000	845,890	15.0	7.9
Chicago	2,701,000	554,114	20.5	10.0
Philadelphia	1,824,000	199,650	10.9	7.1
Boston	1,562,000	272,244	17.4	9.1
Detroit	1,125,000	134,491	12.0	11.3
St. Louis	1,029,000	92,603	9.0	6.7
Cleveland	904,000	109,371	12.1	6.6
Pittsburg	880,000	110,647	12.6	8.2
Baltimore	734,000	79,011	10.8	7.1
Los Angeles	642,000	136,598	21.3	....
Cincinnati	594,000	90,485	15.2	9.8
Buffalo	533,000	65,042	12.2	6.0
Milwaukee	525,000	74,153	14.1	8.6
San Francisco	520,000	143,318	27.6	16.0
Newark	491,000	46,543	9.5	....

WHISKY-SELLING DOCTORS

CAN ANY MAN who wants a drink obtain it by asking for a physician's prescription? This seems to be the opinion of some who have never tried it. The medical profession has not been free from its due proportion of swindlers and law-breakers; and possibly there are reputable physicians who do not believe in prohibitory laws and consider it proper to "beat" them when they can. A frank facing of the situation by the profession is advised editorially by *The Journal of the American Medical Association* (Chicago, July 17). If one were to take seriously the newspaper jokes and gibes regarding the prescribing of whisky by physicians, says the writer, one might assume that the medical profession had lost all honor. Any self-respecting physician must blush for shame, he goes on, at what he regards as slanders on his profession. Unfortunately, however, the charges are apparently true, he admits, so far as they apply to some physicians. The office of the Federal prohibition enforcement officer for Illinois contains sufficient evidence to establish the truth of the reports, so far as they concern a not inconsiderable number. He continues:

"As is well known, the regulations governing the prescribing of intoxicating liquors require that prescriptions shall be written on regular blanks provided by the Government, which are issued in book form. Each of the books contains one hundred blanks, with corresponding stubs. On these stubs must be written the date, the name of the patient, the amount of whisky prescribed, and the disease for which it is given. These stubs are a record of what the physician has prescribed during a certain period. Before obtaining a new book, the physician must return the stubs of the old one. Examination of these stubs reveals that some physicians have been writing from seventy-five to one hundred prescriptions for whisky a month. The stubs of a dozen different books examined at random show that in no single instance was the prescription for less than the maximum quantity allowed by law—one pint, or sixteen ounces. An analysis of ten books—one thousand blanks—shows that the diseases given as the reason for prescribing whisky were: bronchitis, 354; general debility, 167; la grippe, 163. Boils, coryza, diabetes, nephritis, endocarditis, eye-strain and headache, hay-fever, nasal catarrh, rheumatism, and urinary irritation were some of the other disease conditions for which whisky was given.

"Undoubtedly, the conditions in Chicago are duplicated to a greater or less extent in other cities. Naturally, the proportional number of physicians who are selling their rights and privileges as members of an honorable profession for 'a mess of pottage' is very small; but that even a small number of physicians could be so lacking in honor reflects on the profession as a whole. Our profession has always been regarded by the public as an honorable one. Its members are presumed, by the very nature of their calling, to be upright and dependable. Physicians are, in a sense, a privileged class, as is emphasized in the laws of all civilized nations. With the privileges go certain responsibilities and obligations which every physician, tacitly at least, assumes when he enters the profession. It is such a privilege that was conferred on him by the Government, under the laws enforcing the principles of the Eighteenth Amendment to the Constitution of the United States. These privileges were granted on the assumption that there might be times when physicians would need to prescribe intoxicating liquor for sick persons. It is beside the question as to how many prescriptions for liquor any physician may need to write in a certain length of time. It is obvious—there is no denying the fact—that some physicians are grossly abusing their trust in this matter. The privileges were granted to physicians with the presumption that they would use them honorably and would prescribe intoxicating liquor only when absolutely necessary—if such necessity ever exists.

"The whole question is a serious one which should be faced frankly by the organized profession. It is one which merits the immediate attention of county medical societies throughout the country. Already physicians in many communities have taken action defining their attitude toward those physicians who have traded an honorable name for the unworthy title of 'bootlegger.' For the good name of our profession, it should be made known to the public in an emphatic manner that such disreputable practises on the part of any physician are not condoned. *Noblesse oblige.*"

HOW BUTTERFLIES HEAR

IN RECENT YEARS numerous interesting experiments have been made with regard to the sensory organs of insects. In the latest volume, No. 41, of *The Zoological Year Book* (in German), published in Berlin, there are reported the results of an extremely extensive study made by Mr. F. Eggers, concerning the organs of hearing of some of the butterflies, the spiders, and the moths. These possess certain structures in the last ring of the thorax which have hitherto escaped notice, and whose true significance has been ignored. It now appears that this structure is a so-called tympanal organ, similar to that possest by crickets and grasshoppers, but much more delicately constructed. The essential part of this organ is an air-filled, tracheal vesicle or "bladder" (such as is possest by many winged insects and by some butterflies), which lies very close to two extremely thin portions of the external covering of chitin; these two attenuated portions of the chitin are known as the true drumhead and the opposite drumhead. The "true drumhead is so called because it is connected with the delicate nervous apparatus designed to receive the vibrations of sound waves; the opposite drumhead is not thus provided and probably acts merely as a sort of sounding-board to reenforce the vibrations. The nerve apparatus itself consists of a strand of connected cells attached to the elastically vibrating drumhead; this strand of cells contains two sensory cells whose most delicate projections end in the co-called "peg," which is characteristic of what is known as the chordo-tonal organs.

That the insect distinguishes sounds through the tympanal organ has been satisfactorily proved by experiments with crickets, since it has been found that the well-known chirping sound uttered by the male attracts only those females in possession of this organ, whereas, when it was destroyed, the female was incapable of perceiving the ardent serenade of a would-be wooer. It is reasonable to conclude that the very similar but more delicate organ in butterfies has a similar function, tho we can not test the matter in the same manner, but it seems certain that many butterflies are affected by high, shrill tones, such as that made by rubbing a cork against a wet glass, and that in the *Endrosa aurita* the female answers a clattering sound made by the male with a fluttering motion of the body and wings. In general, it seems especially the males which are provided with a chirping apparatus. But while the production of sound is thus shown to be connected with the mating instinct and to form a means of courtship, this function is also assisted by sight and smell. An unexpected discovery is that organs of hearing are more frequently found in butterflies that fly by day than in those that fly by night.

TO AVOID POISONING BY AUTOMOBILES

TO POISON A MAN, an automobile needs to be shut up with him. No one ever heard of an automobile poisoning any one in the open air, altho its exhaust contains the most deadly gas known—carbon monoxid. But put the automobile and the man in a tight compartment and the event would be different. Build a narrow duct just big enough to hold a stream of motor-cars a mile and a half long, make no provision for fresh air, and you would simply have a lethal chamber on a huge scale. Such a death-trap would be the vehicular tunnel under the Hudson, without due ventilation. In *The Popular Science Monthly* (New York, August) Dr. Yandell Henderson, consulting physiologist of the United States Bureau of Mines, tells of experiments conducted at Yale University, to ascertain just what degree of ventilation will be necessary, in the tunnel, to prevent disagreeable results—even so minor an accident as a slight headache. Writes Dr. Henderson:

"If a man or animal were shut up in a small garage with a four-cylinder car, three cylinders of which were missing, the carbon monoxid diffused by the one active cylinder would induce death before the three other cylinders had discharged enough unconsumed gasoline to produce by itself slight nausea.

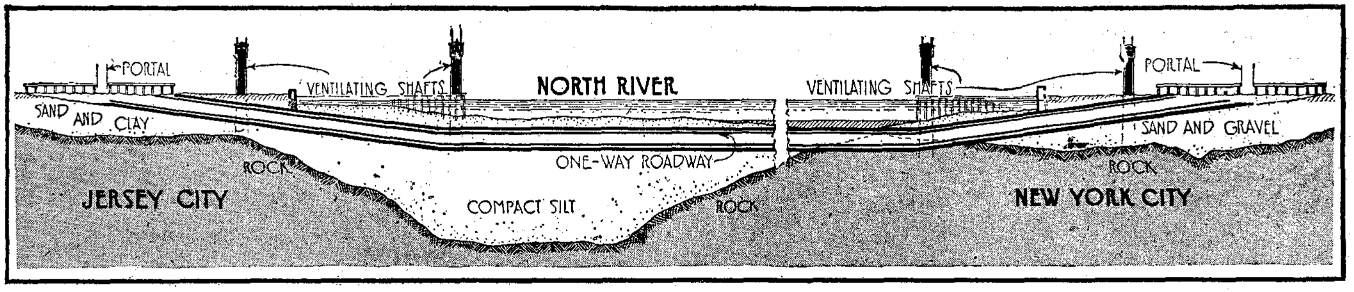
"Every automobile-driver knows that the products of combustion discharged into the atmosphere by his engine are highly poisonous. But he erroneously attributes their toxicity to vaporized, unburned gasoline and not, as he should, to carbon monoxid. It is true that gasoline vapor breathed has an intoxicating, nauseating effect; but it is the carbon monoxid that is really to be dreaded. Moreover, the combustion of one part of gasoline vapor in an engine produces about two parts of carbon monoxid—all the more reason why a man should know more about the fumes discharged by his engine.

"What is carbon monoxid? . . . This gas is responsible for more deaths than all other gases combined. It is the chief constituent of illuminating gas, and to illuminating gas in turn may be traced an unfortunately large number of fatalities in American cities.

"Now this deadly carbon monoxid, which is discharged by automobiles, found in mines, and liberated by coal fires, is itself almost odorless. It has no irritating effect on the lungs. It is peculiarly treacherous and subtle.

"While it has no direct effect upon the tissues of the body or even upon the nerves, it impairs the blood. . . . On the open road this is a matter of no moment; but when it was decided to construct tunnels under the Hudson River between New York and New Jersey—tunnels to be used principally by motor-vehicles, trucks, and passenger-cars—it became at once a very practical problem to find out how far the air in a confined space may safely be polluted by carbon monoxid."

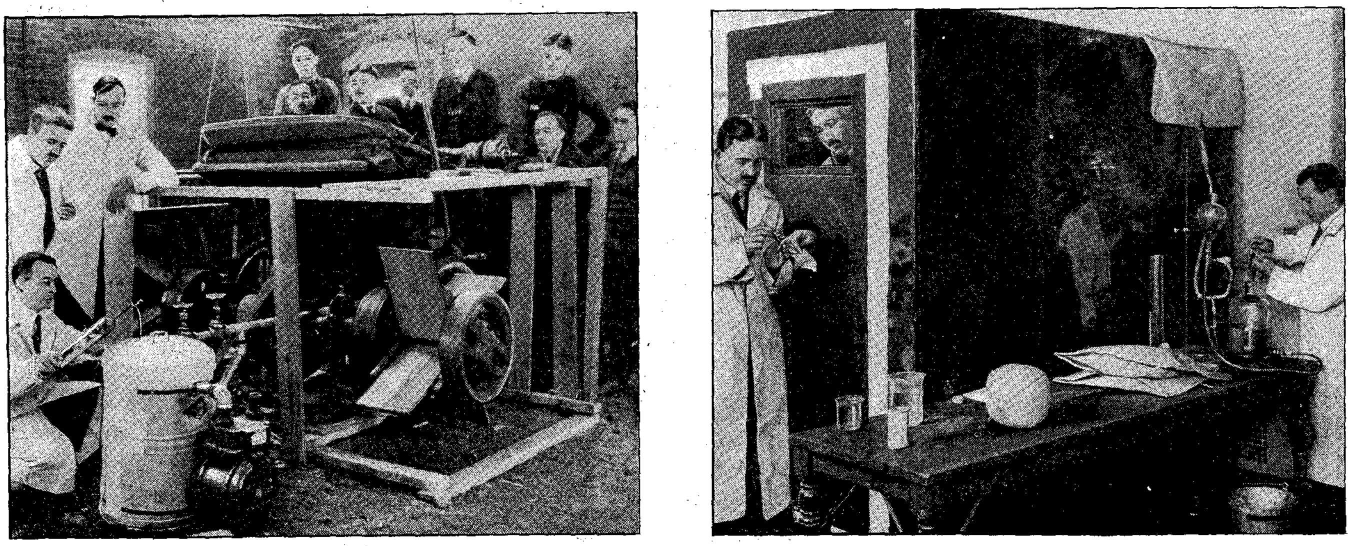
Curiously enough, Dr. Henderson goes on to say, a scientific study of the effect of carbon monoxid under conditions that



Illustrations by courtesy of "The Popular Science Monthly."

A PLAN OF ONE OF THE PROPOSED VEHICLE TUNNELS, SHOWING THE VENTILATING SHAFTS.

The tunnel, as planned, will consist of metal section tubes, each tube being a "one-way" passage for automobiles or horse-drawn vehicles.



TESTING THE POISONOUS QUALITY OF THE AUTOMOBILE EXHAUST.

In a closed garage Dr. Henderson made tests from exhaust gases expelled by a Ford car. The effects of measured amounts on men and horses were observed. Within the box at the right is a man who breathes measured amounts of gas. He puts out his hand to have a sample of his blood taken.

would prevail in a vehicular tunnel has never been made. The conditions in coal-mines and in gas-producing plants have been studied, but the results apply only to healthy workingmen. Tunnels for vehicles will be used by the general public—adults, children, and even invalids on their way to the hospital. Many thousands of automobiles and motor-trucks will discharge exhaust gas into the Hudson River tunnels—far the largest ever constructed for motor-transportation. Two lines of traffic abreast will pour in a constant stream through each of the two tubes. He continues:

"It might be argued that a powerful blower system which would always scavenge the tunnels and insure a constant supply of fresh air could be installed. But engineers tell us that such a blower system would be extremely expensive, and, moreover, that a veritable gale would have to sweep through each tunnel to remove the gases. No one would care to use the tunnels if a hurricane had to be encountered when passing through them.

"The tunnels must be ventilated in the least expensive and the least objectionable way. The thousands of men and women who will daily pass back and forth through the tunnels must not suffer from headaches as the result of breathing exhaust gas. First of all, the human equation must be considered.

"As we have said, there is much information on carbon monoxid, but it does not cover the problems of the engineers who will construct the tunnel. . . . Accordingly, the bridge and tunnel commissions of the States of New York and New Jersey requested Mr. Van H. Manning, Director of the United States Bureau of Mines, to make a scientific investigation which would determine, first, the amount and character of the exhaust gas expelled by various types and sizes of motor-trucks and passenger-cars, and, secondly, the nature of the poisonous substances and their allowable concentrations. Since the writer had previously had experience in conducting research on the physiological effect of gases, he was asked by Director Manning to find out to what extent exhaust gas must be diluted with air to be rendered practically harmless for short periods. . . . . . .

"First of all, we built a little chamber of six cubic meters capacity—roughly, five and a half by six by seven feet. We made it gas-tight. In this chamber members of the investigating staff were subjected to tests for periods of one hour. They breathed various quantities of carbon monoxid—quantities that varied from two to eight and in a few cases ten parts in ten thousand of air. A man could stick his hand through a sleeve in the wall of the chamber without admitting air, so that blood could be drawn from his finger. Blood was thus drawn at the middle and end periods and usually one or two hours later. How much air did a man breathe under varying conditions? We made the necessary measurements. Did his pulse rise or fall? We counted the number of the beats. Was his sight affected? We examined his retina and tested his eyesight. Could he stand with his eyes shut after breathing carbon monoxid in varying amounts? We made the test. Did he become dizzy after physical exertion? We made him ascend and descend four flights of stairs in eight seconds.

"Of all signs and tests, headache is the most definite. No one suffered appreciably from headache after a period of one hour in the chamber charged with four parts of carbon monoxid in ten thousand of air. When six parts were introduced, a slight effect was usually felt. When the amount of carbon monoxid was increased to eight parts, decided discomfort was felt for some hours, altho the subject could still work efficiently. Ten parts of carbon monoxid made the most resistant man miserable. He had no desire to work for five or six hours after he had breathed that amount of the gas.

"After we had conducted these experiments in the small chamber we made large-scale tests. A brick chamber thirty feet square with an air capacity of twelve thousand cubic feet was built—approximately the capacity of a section of a tunnel holding one car. In this chamber we installed a Ford automobile so that the rear wheels turned large paddles that mixed the air. We ran the car under different conditions so as to vary the amount of exhaust gas.

"From ten to twenty men at a time were taken into the chamber. They certainly learned at first hand the effect of carbon monoxid (or oxygen deficiency)—headache.

"What did we learn from these large-scale experiments? There was slight discomfort due to smoke and smell when the engine was not running well, but the men suffered no appreciable ill effects when concentration of carbon monoxid as high as five in ten thousand parts was maintained. When we introduced eight parts in ten thousand for an hour, practically all the men became ill with headache and nausea. The volume of breathing proved to be the most important element; it caused individual variations in the effects of inhaling the gas. . . . A strong, active man who breathes a large volume of air absorbs carbon monoxid more rapidly than a small-breathing man. A motor-truck driver is therefore worse off in a badly ventilated tunnel than a clerk who leads a sedentary life. . . . We can say, then, to the engineers:

"'Ventilate the tunnels on the basis that for periods up to one hour four parts of carbon monoxid in ten thousand of air will be the maximum pollution for a man at rest.'

"As a result of the investigation, it is clear that if the tunnels are ventilated longitudinally, or in sections, so that the concentration in some places is only one part or less, the air that finally emerges may contain as much as six parts of carbon monoxid in ten thousand.

"This means a considerable reduction in the cost of ventilation and yet gives an assurance of safety and comfort."

DEPARTMENT OF SCIENCE AND INVENTION CONTINUED ON PAGE 89

LETTERS - AND - ART

LITERATURE DRAMA MUSIC FINE-ARTS EDUCATION CULTURE

NEW PRAIRIE ARCHITECTURE

SKY-SCRAPERS, so long bewailed by our European visitors, were pleaded as the only solution of the business-housing problem of New York, where space was limited horizontally. Such an excuse is not to be thought of, however, on the boundless prairie; yet Nebraska chooses the sky-scraper tower instead of the dome as the architectural feature of its projected State-house. The long, level lines of the Mid-West furnish the architect, Mr. Bertram G. Goodhue, his justification for escape from traditional Gothic and Hispanic, in which his imagination has chiefly worked. The building designed for Lincoln, Mr. Bryan's home town, is, in the words of a writer in the New York *Times*, "a radical departure—the beginning, perhaps, of a new school of Prairie architecture, with a sort of high visibility as its motive—a four-hundred-foot tower crowned by a glittering dome visible fifty miles across the flat country upon which it stands." Mr. Goodhue's design, chosen in a competition where our foremost architects were represented, is tentative in the sense that the completed building may differ from this sketch, but must exhibit the same spirit that imbues the first sketch. The writer gives us some interpretative details:

"The building, as at present planned, covers a big square of ground area, with its chief architectural feature that massive tower which will be so built that it can be used for library stack-rooms and for the filing of State documents. Its work in life is indicated by its architectural exterior, as every real art should declare its purpose, be it a hand-tooled book or a church façade. For the brief hour of folding-bed art is over. Topping the tower is a golden dome which shall gleam like a lighthouse at sea across the flat country.

"The main body of the building seems hardly three stories high—altho none may tell what rooms lie hidden in a cornice with apparently no windows to tell the tale. In fact, most of the lighting for this building will come from four inside courts. The outside windows are small and few, for two reasons. Partly the climatic conditions have influenced the design, as is proper whether you are building in Cairo or in Reims. The climate of Nebraska knows the bitterness of a wind-swept winter and the scorchings of an unshaded summer. Both are mitigated by the sheltered courts.

"Then, for pure architectural reasons, a window-broken wall would be too fragile a base for such a tower. Again, had classic pillars adorned the façade they would have cast shadows too delicate for the massive thing which they must appear to uphold. Having committed itself to that stupendous tower, the building must pay the price. Having chosen strength and brutal vigor as its qualities, the Nebraska State Capitol must be content when that ambition is attained—without any of your side-lines like jeweled windows.

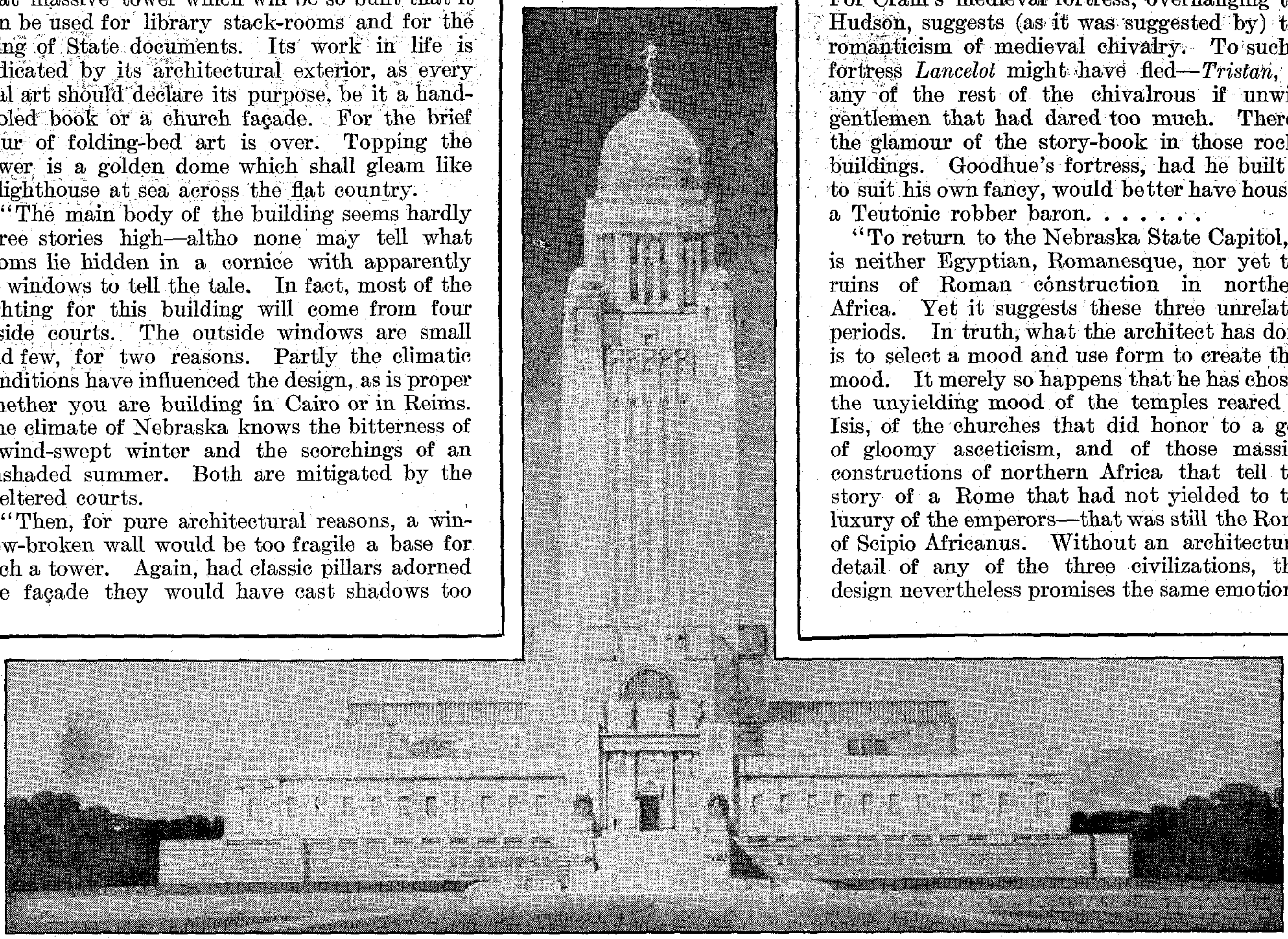
"Only twice is the front façade broken—and that in a way that has become a favorite with Goodhue, that great masses of masonry may pile up from the ground area in blocklike shapes. Thus the ground floor juts out beyond the main entrance floor until a terrace is formed—not unlike the driveway about the Grand Central Station—while the third floor, or rather block of rooms, is thrust farther back still.

"Not even in the features of the main entrance does the stern mood of this building yield to the blandishments of the gracious. Its claim to beauty, too, lies in the final rightness of good proportions and in consistency. The very statues play to the key in which the building is pitched, growing as they do out of the stone."

The Nebraska Capitol, we are told, can not hope for the quality of Grecian art. "It will know the power of the foot-ball-player and not the Russian dancer." Furthermore,

"Its vigor will be of a cruder form than that of the West Point buildings, which were erected by Cram, Goodhue & Ferguson, but where Cram's influence prevailed. For Cram's medieval fortress, overhanging the Hudson, suggests (as it was suggested by) the romanticism of medieval chivalry. To such a fortress *Lancelot* might have fled—*Tristan*, or any of the rest of the chivalrous if unwise gentlemen that had dared too much. There's the glamour of the story-book in those rocky buildings. Goodhue's fortress, had he built it to suit his own fancy, would better have housed a Teutonic robber baron. . . . . . .

"To return to the Nebraska State Capitol, it is neither Egyptian, Romanesque, nor yet the ruins of Roman construction in northern Africa. Yet it suggests these three unrelated periods. In truth, what the architect has done is to select a mood and use form to create that mood. It merely so happens that he has chosen the unyielding mood of the temples reared to Isis, of the churches that did honor to a god of gloomy asceticism, and of those massive constructions of northern Africa that tell the story of a Rome that had not yielded to the luxury of the emperors—that was still the Rome of Scipio Africanus. Without an architectural detail of any of the three civilizations, this design nevertheless promises the same emotions.



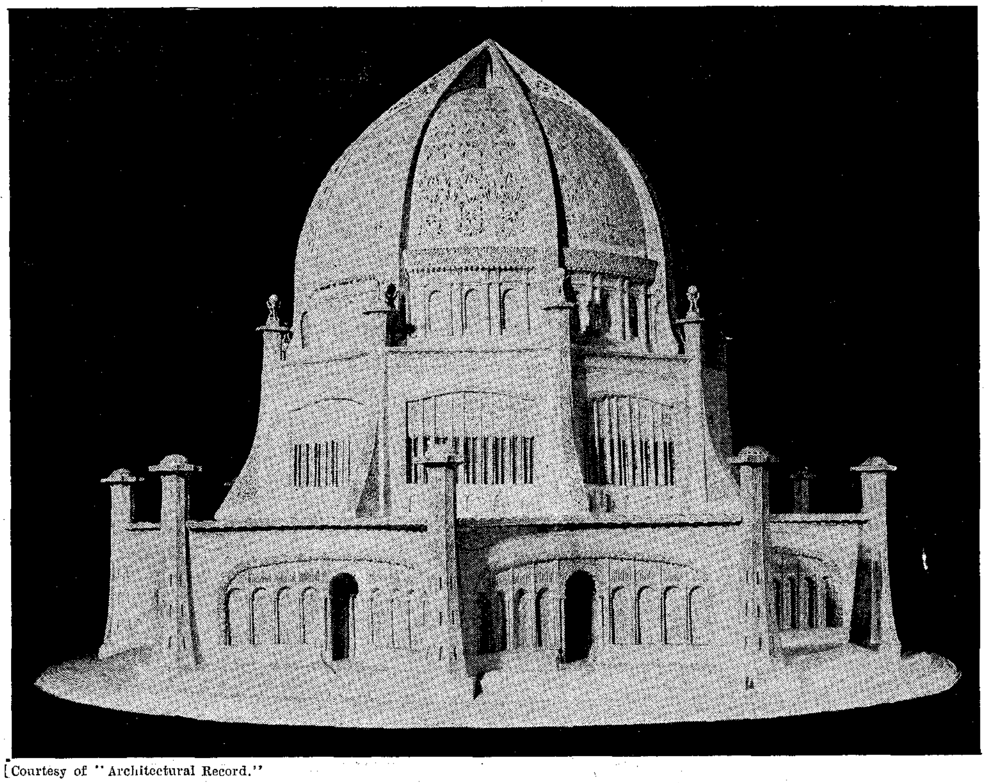
THE SKY-SCRAPER DESIGN APPLIED TO A STATE-HOUSE.

Mr. Bertram G. Goodhue's first sketch from which the Capitol at Lincoln, Nebraska, will be developed. The level prairies are thought to be an excellent background for the building "with high visibility as its motive."

> "This is the most ambitious form of architectural creation—to create from the emotions out instead of from the architectural features in. A work of art in the emotional sense must be the result, given a technique and a sense of proportion trained until they have become automatic. But will it be a work of art that you want to have around the place? For that is the danger in perpetuating a mood in imperishable stone. It might be a mood of anger, of cruelty, of aloofness—even of pettiness."

We are assured that this will be "no timid copy of a dead art." Nebraska, be it said, "has dared—where other States have bought their Capitols, more or less ready-to-wear, of the standard Washington model."

Equally daring in originality, perhaps, is the model designed by Mr. Louis J. Bourgeois for the Bahai Temple to be built for Chicago. Even more so, we must admit, if Mr. H. V. Magonigle, another architect, is to be trusted, that the temple is "the first new idea in architecture since the thirteenth century." In *The Architectural Record* (New York) Mr. J. R. Reid writes of this plan, executed in plaster instead of drawn on paper:



[Courtesy of "Architectural Record."

MODEL OF DESIGN FOR THE BAHAI TEMPLE, CHICAGO,

Which authorities declare is the first new idea in architecture since the thirteenth century.

> "In form the temple is a nonagon, or nine-sided structure, and its lower story offers a complete innovation in architecture in the use of nine inverted half circles, with a great doorway in the center of each, so that from whatsoever side one approaches the edifice it seems to extend its arm in welcome. From dome to foundation it is a unique creation and unlike any building in existence, yet one reads in its curving beauty the story of the architecture of the world. The first floor in its simplicity of line suggests the Greek and Egyptian temples; while the treatment of the doors and windows is Romanesque in form, and both Gothic and Arabic in the intricacy and beauty of ornamentation. The second story is Renaissance in line and Gothic in the interlaced arches of its openings. The third is restful, quiet, and Renaissance in treatment. Above it rises a lovely dome, suggestive of Byzantine forms; but above the closed top rise other beams of the dome itself like hands clasped in prayer, so that the dome gives the feeling of ascension and aspiration found previously in the Gothic towers alone.
>
> "In the geometric forms of the ornamentation covering the columns and surrounding windows and doors of the temple one deciphers all the religious symbols of the world. Here are the swastika cross, the circle, the triangle, the double triangle or six-pointed star (or Solomon's seal, the magic symbol of necromancers of old); but more than this, the noble symbol of the spiritual orb, or sun behind the Savior of mankind; the five-pointed star, representing the man Savior—Christ or Buddha or Mohammed; the Greek cross, the Roman or Christian cross; and, supreme above all, the wonderful nine-pointed star, figured in the structure of the temple itself, and appearing again and again in its ornamentation, as significant of the spiritual glory in the world to-day.
>
> The nine-pointed star reappears in the formation of the windows and doors—which are all topped by this magnificent allegory of spiritual glory, from which extend gilded rays covering the lower surfaces, and illustrating, in this vivid and artistic limning, the descent of the Holy Spirit.
>
> "The temple will be a great place of worship for all mankind. Its doors will never be closed; no priesthood will ever officiate within its walls; about it will be gardens and fountains; and beyond these, a series of buildings devoted to the application of true religion to life. . . . Only worship can be voiced in the temple itself."

CAN POPULAR SONGS BE "STAMPED OUT"?

A DEMAND TO "STAMP OUT" POPULAR SONGS has been made by the national music chairman of the General Federation of Women's Clubs. The grounds of their offense is their "influence upon our young people." Mrs. Anna Faulkner Oberndorfer is the leader in the crusade, and she declares that "ninety per cent. of the popular songs are unspeakable." No specific instances are given of these offenders, and we are left to conjecture what they may be from the few which are given a clean bill of health, such as "The Long, Long Trail" and "Keep the Home Fires Burning." Nevertheless, Mr. Kenneth S. Clark warns us of a "vigorous offensive" about to be prosecuted by the Clubs. In *Musical America* (New York) he gathers up a sheaf of opinions, first quoting Mrs. Oberndorfer on the subject. She says:

> "I have worked for twenty years on the theory that jazz and ragtime, in its original form, would be the basis of the future American school. But that is no reason why I can not see that ragtime and jazz, when vulgarized, are an actual menace to the life, morals, and education of young America to-day.
>
> "When one knows that in one of Chicago's biggest and best high schools the students bought two thousand popular songs in two weeks, and that the committee of students appointed by the school found only forty which they considered fit for boys and girls to sing together, don't you really think something should happen to awaken American parents to their responsibilities?
>
> "In a Middle-Western city where I had been giving talks in which I attacked the evil popular songs I said to the manager of a music-shop that I hoped I had not hurt her business. She replied, 'If I could help you in this campaign I'd give up everything else in the world to do it.' She told me that seventy-five per cent. of her customers were high-school boys and girls who bought nothing but this trash, and she said that they blushed when they asked for it."

The Community Service, Incorporated, tried, through W. C. Bradford, the director of its Department of Music, to find out whether "musically interested people should shut their eyes to popular songs and pretend that they do not exist with regard to the children," or should "pick out the best that are produced, and not to condemn all popular songs." Robert G. McCutcheon, dean of the School of Music at De Pauw University, replies in this way:

> "I have frequently called attention to the fact that one of the serious difficulties confronting public-school music people lay in the character of the material they used. There has been more poor pedagogy demonstrated in the teaching of music in the public school than in any other subject with which I am familiar. The teacher does not put himself on equal terms with the pupil; he does not meet him half-way.
>
> "One reason why we have so much difficulty in getting the proletariat to attend high-grade concerts and recitals is because of the attitude of the artist who plays and sings that which appeals to himself, losing sight entirely of whether or not the audience is pleased. John McCormack and others of his type are great teachers because they meet the audience more than half-way, and, while giving things they can comprehend, fill the greater part of their program with the better class of compositions.
>
> "I would much prefer to have our generation sing popular songs than not to sing at all. If this generation sings, the next generation will sing better things, and the next generation still better. On page 105 of 'Pratt's History of Music,' in his discussion of the technical phase of folk music, he closes with these sentences: 'Even until 1600 some features of folk music seemed to educated musicians rather vulgar. To-day we can see there was no more valuable development in the evolution of modern styles than this same despised music of the people's instinct.' I am wondering if he has not stated some things in regard to the situation existing in 1600 that will hold good in large part to-day."

The Grand Rapids director of music in the schools, John W. Beattie, who was recently elected president of the Music Supervisors' National Conference, does not join in with the steam-roller projects of the women. He says:

> "It is idle for people to talk about 'stamping out popular songs.' But I can see no reason for teaching them in the public schools. That the children will learn them anyway does not constitute a very good reason for introducing them into school life. If the schools perform their proper function, a taste for good music can be developed among school children. I can not see how the singing of popular songs could fit into such a scheme.
>
> "There are some wholesome popular songs; but the number of those which are positively vicious in their effect far outnumbers those which have real merit. The community singing movement may have called forth the writing of a few good popular lyrics, but it has apparently done nothing to diminish the number of songs which are inferior musically and whose words are worse than inferior. Many educators have no knowledge which enables them to distinguish good music from bad, and apparently they pay little attention to the words. There are songs such as 'The Long, Long Trail' and 'Keep the Home Fires Burning' which have gained a real hold upon the affections of the American public. No one objects to school children singing them. But who is to form the basis for a common-sense stand on the part of musical educators? By far the safest plan will be to stick as closely as possible to material which has been pronounced of the right sort by musicians who are competent to judge."

"FORCE OF HUMOR" IN MUSIC—America need pride itself no longer on jazz. It has gone abroad and raised up enemies for this country in places where only an excuse seemed to be desired. In developing jazz from its native negroid rhythms the colored race have, of course, lent their aid, and they still remain the best performers. An Englishman, however, has heard a colored orchestra in London and writes in *The Daily Chronicle* that "in the spontaneous music and naive accompanying body-movements of these colored performers there was no trace of the vulgarity and veiled indecency which, since their adoption by the white man, have become characteristic of the so-called jazz tunes and the wrigglings and undulations of the so-called jazz dances." The writer, by name "Collum," seems to seize a chance to relieve some of the recently accumulated irritation against America, and shows how we have missed the finer spirit of negro music:

> "I discovered that the characteristics of this Southern negro music are not, as America has interpreted them for us, vulgarity and bizarreness. They are an honest native sense of rhythm and a spontaneous response [to the *vis comica* in music, . . . the 'force of humor,' that bubbles up in it and makes each performance a delight not only to the average Western audience, but to the musicians themselves. What a piquant pleasure it is to go to a musical show and to be thoroughly entertained—to be made to enjoy oneself without concentration of effort, to be sent off into ripples and roars of happy laughter, not by anything untoward or grotesque, but by the sheer innate fun of the thing!
>
> "For years and years it has seemed almost an impiety to think of humor in connection with music. Music as an accompaniment to comedy and farce, music as a handmaiden to the banalities of that mirth-lacking production of a *blasé* age, the modern *revue*—ah, yes! But humor in the music and the musicians themselves, oh, dear me, no! That were a contradiction in terms.
>
> "If these colored musicians, in their happy-go-lucky performances, their humorous improvisation embroidered, as you might say, all about the *motif* of their design without in the least destroying its rhythmical balance or the strict discipline of their *ensemble* playing—if they can demonstrate to our sophisticated musical scientists that music is not necessarily a serious business for the mathematicians and the *virtuosi*, but can be also an ebullition of spontaneous art instinct with the *vis comica* to which music has been so long a stranger, they will have done much more for us than merely to give our *blasé* Londoners a chance of a real good laugh."

"SHAKESPEARE" IDENTIFIED AGAIN

THE DISQUIETING QUESTION, "Who's loony now?" which some years ago had much currency among us, might be revived in a double sense. Probably few had heard of the name of the author of "Shakespeare Identified" before his book appeared to snatch away again the long-worn laurels of the Stratford-on-Avon person. That a writer named J. Thomas Looney should venture again into this disputed realm argues, at least, an abounding faith in his cause. Mr. Looney declares that he has explored "the internal and external conditions of the old theory of Shakespearian authorship," and that he finds the whole presents "such an accumulation and combination of anomalies as to render it no longer tenable." In this, of course, he has had many predecessors who are now conveniently grouped as "Baconians," tho not all of them sponsor Bacon as the substitute. Besides the theorists are many who enroll in the anti-Stratfordian field. Mr. Oliver Herford, in *Leslie's Weekly*, calls a formidable roll: "Whether you believe that Shakespeare was the author, or whether you agree with Emerson, Holmes, Whittier, Whitman, Coleridge, Mark Twain, and many others that he was no more than a human dummy or personal alibi for some great unknown—or whether you have no views of any sort on the matter and don't care a hang who wrote the Shakespeare plays and sonnets, Mr. Looney's book is fascinating reading, more thrilling even than the best detective story by Mary Roberts Rinehart or (for those who can read him) Edgar Allan Poe." In Mr. Herford's way of putting it, Mr. Looney gives the poets of Elizabeth's court the "once over," and "points an accusing mental finger at Edward de Vere, seventeenth Earl of Oxford, as the 'guilty party.'" From that moment, we are told, "items of evidence seemed to fly from every direction as if eager to confirm what at first seemed scarcely more than a guess—fitting together and interlocking with all the satisfying nicety of a 'jig-saw' puzzle." Here are the points as Mr. Looney enumerates them:

> "Beginning with a characterization of Shakespeare drawn from a consideration of his writings, a characterization embracing no fewer than eighteen points and involving a most unusual combination, we proceeded to look for the dramatist. Using the form of the 'Venus and Adonis' stanza as a guide, we selected one Elizabethan poem in this form, which seemed to bear the

greatest resemblance to Shakespeare's workmanship. The author of this poem, Edward de Vere, was found to fulfil in all essentials the delineation of Shakespeare with which we set out.

"We next found that competent literary authorities, in testifying to the distinctive qualities of his work, spoke of his poems in terms appropriate to 'Shakespeare.' An examination of his position in the history of Elizabethan poetry showed him to be a possible source of the Shakespeare literature, while an examination of his lyrics revealed a most remarkable correspondence both in general qualities and in important details with the other literary work which we now attribute to him. Turning next to the records of his life and of his family, we found that these were fully reflected in the dramas, the contents of which bear pronounced marks of all the outstanding incidents and personal relationships of his career, while the special conditions of his life at the time when these plays were being produced were just such as accorded with the issuing of the works.

"His death, we found, was followed by an immediate arrest of Shakespearian publication, and by a number of other striking evidences of the removal of the great dramatist, while a temporary revival of publication a few years later was of such a character as to give additional support to the view that the author was then dead. Finally, we have shown that the sonnets are now made intelligible for the first time since their appearance, and that the great dramatic *tour de force* of the author is nothing less than an idealized portraiture of himself.

"Summed up we have:

1. The evidences of the poetry.
2. The general biographical evidence.
3. The chronological evidence.
4. The posthumous evidence.
5. The special arguments:

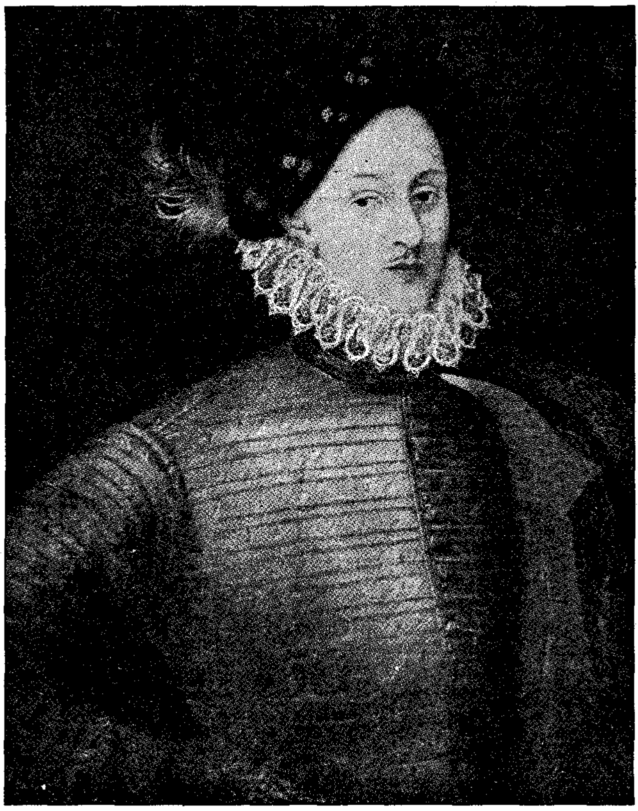
(a) The 'All's Well' argument.
(b) The 'Love's Labour's Lost' argument.
(c) The 'Othello' argument.
(d) The Sonnets argument.
(e) The 'Hamlet' argument.

"It is the perfect harmony, consistency, and convergence of all the various lines of argument employed, and the overwhelming mass of coincidences that they involve, that give to our results the appearance of a case fully and, we believe, unimpeachably proved. . . . . . .

"Only one conclusion then seems possible, namely, that the problem of the authorship of Shakespeare's plays has been solved, and that all future inquiry is destined to furnish but an accumulating support to the solution here proposed. . . . . . .

"The matter must now pass out of our hands, and the case must be tried in public by means of a discussion in which expert opinion must play a large part in the formation of a definitive judgment. Whether such discussion be immediate or deferred, we have no doubt that it must come at some time or other, and that, when it does come, the ultimate verdict will be to proclaim Edward de Vere, seventeenth Earl of Oxford, as the real author of the greatest masterpieces in English literature. . . . . . .

"It will not be an easy thing for Stratfordians or Baconians of many years' standing to admit that they were wrong, and that the problem has at last solved itself in a way contrary to all their former views. To sincere admirers of 'Shakespeare,' however, those who have caught something of his largeness of intellectual vision and fidelity to fact, the difficulty of recognizing and admitting an error will not prove insuperable, while their power of thus aiding in a great act of justice will be immense. . . . . . .



LATEST HEIR OF THE BACONIAN CRAZE.

Edward de Vere, Earl of Oxford, who has been selected by Mr. J. T. Looney as the most likely person to have written the plays we ascribe to Shakespeare.

"Speaking no longer from behind a mask or from under a pseudonym, but in his own honored name, Edward de Vere, seventeenth Earl of Oxford, will ever call mankind to the worship of truth, reality, the infinite wonder of human nature, and the eternal greatness of man."

To Mr. John Corbin, writing in the New York *Times*, all this evidence has "the abundance of strained literary and personal analogies and the amazing absence of common sense which characterize most Baconian endeavors." But—

"No shadow of a reason is given why this harum-scarum Earl, who delighted in his company of players and was well known to have written comedies in his youth, should conceal the fact if he was really author of the most popular and highly praised dramas of the time. There is absolutely no evidence connecting Oxford with Shakespeare's company, which was under the patronage of the Lord Chamberlain until Elizabeth died, and then became the King's Players. If it is possible to reduce such an argument to absurdity, that end is reached in the fact that when Oxford died in 1604 some dozen of the plays were, according to the best knowledge and belief, unwritten, including 'Macbeth' (1606), 'Lear' (1607), 'Antony and Cleopatra' (1608), 'Coriolanus' (1609), 'The Winter's Tale' (1611), and 'The Tempest' (1611). All these Mr. Looney assumes to have been written before 1604, but as yet unacted—with the exception of 'The Tempest,' which, he argues, is a poor thing, quite unworthy of his 'identified' Shakespeare, the euphuistic Court poet and comedy writer of the school of Lyly."

Contemporary evidence, such as the allusions to Shakespeare in Robert Greene and Francis Meres, has long been accepted by Shakespearian scholars, but the "bed-rock" is still in the Folio:

"It was published seven years after Shakespeare's death and nineteen years after the death of Oxford. Two of Shakespeare's fellow actors and partners in the Globe, Heminge and Condell, supervised the printing and signed the dedication to William Herbert, Earl of Pembroke. Their purpose, they say, is 'only to keep the memory of so worthy a friend and fellow alive, as was our Shakespeare, by humble offer of his plays to your most noble patronage.' Why Shakespeare's friends should conspire with a nobleman of the Court to perpetrate so monstrous a fraud Mr. Looney does not consider. In commendatory verses prefixt to the Folio, Leonard Digges 'identifies' Shakespeare with Stratford,

—thy works by which outlive
Thy Tomb thy name must, when that stone is rent
And time dissolves thy Stratford Monument.

Ben Jonson's tribute alludes to Shakespeare as 'Sweet Swan of Avon' and gives the plays a eulogy that far transcends that of Francis Meres, both in generosity of praise and in critical acumen. In short, the evidence is overwhelming and has never been doubted by a Shakespearian critic of the first order.

"In the early days of the Baconian madness, scholars strove to speak of it with respect, but were not always successful. W. J. Rolfe compromised with his gentle and courteous disposition by recalling an anecdote: An American boy living in Paris was once so exasperated by his French playfellows that he ran into the house exclaiming, 'Mama, do tell me what is the French for 'damn nonsense!'"

RELIGION-AND-SOCIAL-SERVICE

THE CHURCHES TO BRIDGE THE "BLOODY CHASM"

WHILE ALL "CHRISTENDOM WATCHES," Geneva, the city of Calvin and the first capital of the League of Nations, is this month the scene of an unusual series of international Christian conferences, which, it is hoped, "will prove that further progress has been made in burying both fears and suspicions and that on both sides of the recent 'bloody chasm' there has developed stronger disposition to forget the past and resume joint service to the ideals of human amity." In furtherance of the same ideals the Federal Council of Churches of Christ in America has sent forty "clerical ambassadors" to visit nineteen countries of Europe in order to promote "international understanding and good will," and to "state to the European leaders whom they meet that the United States has more people who want a League of Nations than it has persons who do not." They intend, says the Washington *Herald*, "to add to this prophecy the admission that it is a cause of deep regret that the United States has not officially entered the League." At these great international conferences "all the great family groups, save one, of the churches which worship Jesus Christ as God and Savior will be represented by delegates from every quarter of the earth and of almost every race and every tongue." Invitations have been sent to and been accepted by "all Europe, Australia, and America, all Christian Asia and Africa and the islands of the sea." The languages of the various delegates, we are informed, will be English, French, German, Swedish, Norwegian, Danish, Dutch, Italian, Russian, Greek, Roumanian, Bulgarian, Serbian, and perhaps Armenian and Arabic. With this opportunity before it, the "second American Expeditionary Force" plans, explains *The Churchman* (Episcopal), "the cultivation of international friendship and especially an endeavor to restore the shattered confidence in the United States on the part of the peoples who have been shocked at our failure to ratify the Peace Treaty and to enter the League of Nations."

The three international gatherings include the Ecumenical Conference, which will meet August 9–11; the preliminary World Conference on Faith and Order, August 12–24, and the second postwar conference of the World Alliance for International Friendship—dramatically interrupted when it attempted to hold its initial convention at Constance in the beginning of August, 1914—August 26–29. The Ecumenical Conference, "representing Christians of every faith and every land," is called by the Lutheran Archbishop of Sweden to "consider social and industrial questions in their relations to individuals and to nations." The World Conference on Faith and Order, which will include delegates from "all the great members of the family of Christ save the Church of Rome, which, for the present at least, remains aloof," is being promoted by leaders in the Episcopal Church and looks to the "general reunion of all Christendom." The purpose of the World Alliance is "to promote international friendship through the churches." Thus, remarks the Pittsburg *Christian Advocate* (Methodist), "the last three weeks of August will be devoted to considering how the faith in Christ shall be manifested to the world as its only efficient hope and inspiration and how that faith may be shown by its works for individual, national, and international righteousness and peace and justice." In explaining more specifically the purpose of the Federal Council's "friendly visitors," most of whom will attend the three international conferences, the Rev. Arthur J. Brown, secretary of the Presbyterian Board of Foreign Missions and chairman of the Committee on Fraternal Relations of the Commission on Relations with Religious Bodies in Europe, has written:

> "We feel that such an association of our religious bodies would materially contribute to the success of the League of Nations. We deeply regret that up to the present time our own nation has not officially entered into the League. We believe that a large majority of the American people, and especially of the clergy and laity of our churches, are in favor of the League and earnestly hope that the United States will soon become a member of it. Meantime, we feel that Christian men should make all the stronger effort to develop those moral and spiritual associations between the nations which are, after all, the things of highest importance."

According to *The Herald of Gospel Liberty* (Christian), "officers of the Federal Council state that as representatives of the churches they feel a moral obligation to make such effort as may be possible to repair the damage in the fabric of international good will caused by the failure of the politicians at Washington to measure up to their opportunity in this world-crisis. The sending of these messengers of American friendliness and the extensive relief work promoted through the churches are part of the same expression of their common Christianity in its international application." And *The Christian Observer* (Presbyterian) adds the hope that "the contacts of this gathering may furnish the basis for such brotherhood and understanding as shall make future wars impossible." But more important than any League of Nations, thinks *The Christian Century* (Disciples), "is the building up of international fellowship on the part of those who lead the spiritual life of the various peoples." "There are many people outside of the Church who think the Church of Jesus Christ is torn by divisions and dissensions, that the different religious bodies can not get together upon any appeal," admits *The Western Christian Advocate* (Methodist), but it argues:

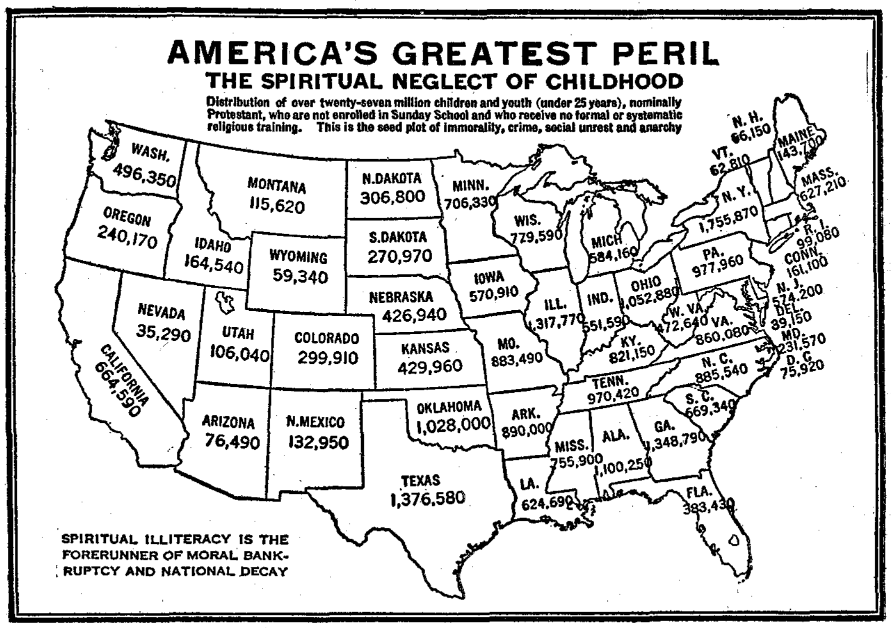
> "This is not true. While there are many denominations and many divisions, the old differences that wrought a spirit of antagonism have almost passed away. The problems of the world have at last appeared in their immensity, producing a feeling that no single denomination can solve them alone. The spirit of cooperation is quietly settling into the consciousness of the leaders of the churches. Now, when a plastic spirit prevails throughout the Christian world and the Christless nations are ready for the gospel of the Son of God as never before, advance must be made all along the line with a spirit of good will that has never been known."

The World Alliance, working "to the end that the spirit of peace and good will may prevail," is especially deserving of support, says Shailer Mathews in *The Independent*. In his opinion:

> "It goes without saying that the World Alliance believes in the League of Nations, but it also believes that the Golden Rule and personal friendships are the best solvent of national misunderstandings. To this end it plans to assemble the representatives of the world's churches. They will pray together, plan together, and get acquainted with one another. That is the first step toward mutual confidence.
>
> "Such a body cherishes no illusions. It knows that it will bring about no sudden conversion of the nations to the Prince of Peace, but that it can help them to moral sanity. It can begin again to internationalize the ideals of Christ. If religion is the one basis of our hope for a world at peace with itself, religion must accustom Christian leaders to friendship rather than to the perpetuation of international enmities."

PROTESTANT NEGLECT OF THE CHILD

THE SPIRITUAL NEED of the vast army of children whose religious instruction is limited to the Sunday half-hour has long been recognized as a demand on the Church, but when the New York Board of Education, in response to an interdenominational committee, voted to give a whole afternoon a week for the religious instruction of children by their own churches, a "divided" Protestantism found itself "shamefully unprepared and utterly unequal to the task." This was how Protestantism, *The Reformed Church Messenger* further points out, met an "opportunity that had long been hoped and prayed for by devout and forward-looking men and women." Comparing the Protestants' failure with the effort of other creeds to meet their children's need, Dr. Henry Sloane Coffin, we are informed, strest the fact before the New York Presbytery that "our Roman Catholic friends have their curates and their sisters, and our Jewish friends have their rabbinical schools, but it will be difficult for us Protestants to get trained women to do this instructing 'right off the bat.'" And *The Messenger* wonders "what would happen in your city or town or rural community if the Board of Education voted a similar opportunity for week-day religious instruction to the children every Wednesday afternoon? Would you be ready to take advantage of such a chance?" It thinks that "perhaps this is one of the methods God will use to convict Protestantism of the sin and shame of the sectarian spirit which has kept apart so long those who ought to be working together for the common good. In this duty of training the childhood of the nation we must indeed hang together, or we will deserve to hang separately." The Sunday-schools are inadequate from the point of view of numbers, efficiency, and time spent in them, says *The Western Christian Advocate*, which thus tersely sums up the situation: "Attack the parochial schools; attempt to introduce the Bible into the public schools and acknowledge the failure of the plan; try to get scholars into the Sunday-schools, of relatively poor quality, and miss over half the children in the community." It suggests that what America should do "is to command every child to attend the public schools, and then allow the different churches, either separately or cooperating, to build up a system of week-day religious schools, giving time for such studies." As the matter stands—


AMERICA'S GREATEST PERIL
THE SPIRITUAL NEGLECT OF CHILDHOOD
Distribution of over twenty-seven million children and youth (under 25 years), nominally Protestant, who are not enrolled in Sunday School and who receive no formal or systematic religious training. This is the seed plot of immorality, crime, social unrest and anarchy
WASH. 496,350
OREGON 240,170
CALIFORNIA 664,590
IDAHO 164,540
NEVADA 35,290
MONTANA 115,620
WYOMING 59,340
UTAH 106,040
ARIZONA 76,490
COLORADO 299,910
N.MEXICO 132,950
N.DAKOTA 306,800
S.DAKOTA 270,970
NEBRASKA 426,940
KANSAS 429,960
OKLAHOMA 1,028,000
TEXAS 1,376,580
MINN. 706,330
IOWA 570,910
MO. 883,490
ARK. 890,000
LA. 624,690
WIS. 779,590
ILL. 1,317,770
MICH 584,160
IND. 551,590
OHIO 1,052,880
KY. 821,150
TENN. 970,420
MISS. 755,900
ALA. 1,100,250
GA. 1,348,790
FLA. 383,430
S. C. 669,340
N. C. 885,540
VA. 860,080
W. VA. 472,640
PA. 977,960
N. Y. 1,755,870
VT. 62,810
N. H. 66,150
MAINE 143,700
MASS. 627,210
R. I. 99,080
CONN. 161,100
N. J. 574,200
DEL. 39,150
MD. 231,570
D. C. 75,920
SPIRITUAL ILLITERACY IS THE FORERUNNER OF MORAL BANKRUPTCY AND NATIONAL DECAY

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> "There is no hope for the future in trying to force religion into the public schools. The sooner we make up our minds to this situation the better it will be. There is no hope for the ultimate Christianization of America without a far more adequate system of religious education. Each community should provide week-day schools wherein paid teachers of training should develop the moral and spiritual natures of the children. Such a system would cost money, but it is worth it. The plan would necessarily imply much overhead organization in the provision for supervision, normal training-schools, and cooperation with the public-school system. If any person desires to know the way of wisdom and of necessity before the church and state in the realm of education, let him read this book and begin to tread the path, however far away may seem the ultimate goal."

"It is amazing how subsidiary a place is given to the care of the children of the Church, who represent the Church's chief asset, and whose culture is the Church's first duty and foremost privilege and investment," exclaims Rev. W. C. Schaeffer, Jr., in *The Lutheran*. And yet only through the children can the Church "fulfil its mission and perpetuate its life. Meeting the need and solving the problem of the young people of the Church and the community is meeting the need and solving the problem of the Church." Nevertheless, he points out, "in 1919 thirteen million Protestants, representing twenty denominations, spent only five and three-tenths cents per member on their Sunday school and Young People's Boards. The typical city church spends $1.46 for music and $1.07 for janitor service to every forty-eight cents for its Sunday-school—and gets results in proportion." From a survey of the situation the writer finds that—

> "Only about one-half of the fifty-three million children in the United States are enrolled in religious schools of any creed. Among Protestants the proportion is even more alarming, in that three out of every five receive no religious training. In 1916 the reported enrolment in Protestant Sunday-schools was 21,888,521. In 1920, according to interchurch statistics, this total had shrunk to 15,617,060. And the problem becomes the more acute in that this dwindling proportion of children of Protestant extraction has its privileges further restricted and curtailed in a reduction to the lowest possible minimum of the hours of instruction. Jewish children receive every year 335 hours of religious instruction, or one hour a day for eleven months in the year. Catholic children receive two hundred hours a year, or four hours a week. Protestant children average one-half hour a week, or twenty-four hours a year!"

The parochial school is not suited to the need, the writer asserts, for "this method drives a wedge of cleavage and draws sharp divisive lines across the life of the community. During the period of their elementary training children ought not to be separated into unfriendly and unsympathetic groups." As our national weakness lies in the divergent views and tendencies of the opposing, separatist groups that constitute our commonwealth, "the Church dare not withhold its influence as a mediator among all these." He urges that the solution of the question lies in the recognition on the part of our school authorities and boards of education of the indispensable place of religious instruction in every complete and adequate course of study. "With this recognition, school courses will be made elastic enough to allow eclectic religious instruction." Explaining further, he writes:

> "Involved in this provision lie, of course, the extension of equal privileges to representatives of all shades of religious persuasion and conviction; the allotment of specified periods of the school sessions for the pupils to repair to their own churches or places of assembly for instruction; and, ultimately, the incorporation into the curriculum of the public schools the standardized courses of religious training and Bible study with credits for advancement and promotion.
>
> "This in turn lays the burden of proof back upon the churches

that they so organize their forces and revise their program that they may qualify for efficiency along the lines of the most advanced and approved educational standards. The progress of the Church during the coming years shall be in this direction, and Dr. Edwin M. Poteat is right when he says: 'The churches must reorganize their work and become schools of religion. At present they are for the most part, and with only here and there an exception, preaching stations, and their aim is the cultivation of personal piety in their members. They must become schools, organized to teach from the kindergarten to old age, and as such community centers gathering the whole community and all ages into a greatly elaborated plant every afternoon and evening with a curriculum of study and recreation all centered in religion. When our churches become schools of Christianity, adequately officered and financed for the greatly enlarged and intensified ministry, we shall begin to put the salt of religion into our society, which, without it, may rot before our eyes.'"

FEWER PULPIT "FREAKS AND FAKES"

MINISTERIAL SPELLBINDERS, cranks, and tramps who flee to some new refuge as soon as they have worn out their welcome in the c d, are decreasing in numbers, says *The Christian Century* (Disciples), which sees in this changed condition a comforting offset to the "appalling number of vacant pulpits." It is true that men are leaving the ministry for business reasons, that "young men are deterred from entering the ministry by the low salaries—not because they will be asked to make real sacrifices—preachers have always expected to do this—but because they are asked to cut themselves off from the broadening study and experiences which their work will demand, and from fulfilling their rightful obligations to their families." But against this state of affairs is this reassuring suggestion: "there are manifestly fewer freaks and fakes in the ministry than formerly." The pulpit is not so often used as the platform of the attitudinizer. "There is no adoring audience in our day for the man who can 'compile' half a dozen sermons from the encyclopedia and books of anecdotes and illustrations, make himself letter-perfect in them, practise their delivery carefully, and then go triumphantly and expectantly from town to town, after the manner of a Broadway idol between seasons." The congregation of to-day demands something more of its pastor. Further comfort is found in the fact that—

"Still less frequently in our time do we see the ministerial tramp of questionable character and record—the man who journeyed from State to State and from denomination to denomination hiding his evil deeds under a professional cloak while he could, and fleeing when he must, only to find a welcome in a new field because of the easy-going faith of the churches in any man who called himself a preacher and who owned a smooth tongue.

"The cranks are fewer. The preacher who had eighteen lectures on the Apocalypse, illustrated by hand-painted charts portraying the Beast, the Dragon, the Living Creatures, and the Vials, does not impart his thrills to the small boys and girls of this generation. The preacher who could argue for soul-sleeping from a genealogical text in the Book of Numbers, and the one who could prove the total annihilation of the wicked from the Song of Solomon—if these are still declaiming with the old fervor, they have gone to small circles of the like-minded.

It is probable that there are fewer great preachers than formerly, because, as the writer puts it:

"It is no doubt true that the modern preacher is too largely a man of affairs, and too largely occupied with the details of parish work, to study and meditate until he shall feel the urge to prophetic utterance.

"But with the scarcity of preachers, and especially with the scarcity of master preachers, we find true satisfaction in the assurance that the average of the ministry is far higher than that of thirty years ago, that the overwhelming majority of ministers are honest and hard-working and eminently sane, and that certain types much admired by many of the churches in the past—to use a bit of slang which seems quite justifiable under the circumstances—'made themselves scarce.'"

THE ORIGIN OF HYMNS

"THE ORIGIN OF HYMNS is not romantic," says Dr. Louis F. Benson, "master of hymn lore" and the greatest hymnologist in the country, who has made a life study of the subject, and who during thirty-five years has made a collection of 8,000 volumes of hymns and books concerning church song. In an interview with Isabella Hastie Smith, writing for *The Continent* (Presbyterian), he told how Charlotte Elliott wrote "Just As I Am" when she was ill and discouraged; "how the darkness of death was creeping over Rev. Henry Francis Lyte when he wrote 'Abide with Me,' and how the inspiration for 'America' came from a little book of European tunes." To the writer—

"Dr. Benson explained that many erroneous stories have been told of the origin of familiar hymns. A popular fable is about the writing of 'Jesus, Lover of My Soul.' The story says that Charles Wesley was standing by a window watching a dove and a hawk fighting in the air. As he watched, the dove flew for protection to the open window and clung to the breast of the famous divine. This story has no foundation in fact, Dr. Benson says. His opinion is that hymns are usually written at desks in studies and not at death-bed scenes or at critical moments of any kind.

"There was no external occasion for the writing of 'My Faith Looks Up to Thee,' but Rev. Ray Palmer, who wrote the hymn in 1830, according to his own account, felt great emotion and spiritual uplift at the time of the conception of his great poem of faith. That hymns are often written for special occasions is demonstrated by 'O Little Town of Bethlehem,' by Phillips Brooks, and 'From Greenland's Icy Mountains.' Bishop Brooks wrote his hymn for a Christmas festival, and the music was written by a Philadelphian, Lewis H. Redner. A strain of music came to Mr. Redner one night, a few days before the hymn was to be sung. He seemed to hear it sung, he told Dr. Benson, and immediately wrote it down. The missionary hymn was written for a special missionary service at the request of his brother-in-law by Reginald Heber in 1819. Heber was afterward a bishop. The original manuscript of the hymn sold for forty-two pounds sterling, more than the amount of the entire offering at the missionary service for which it was written.

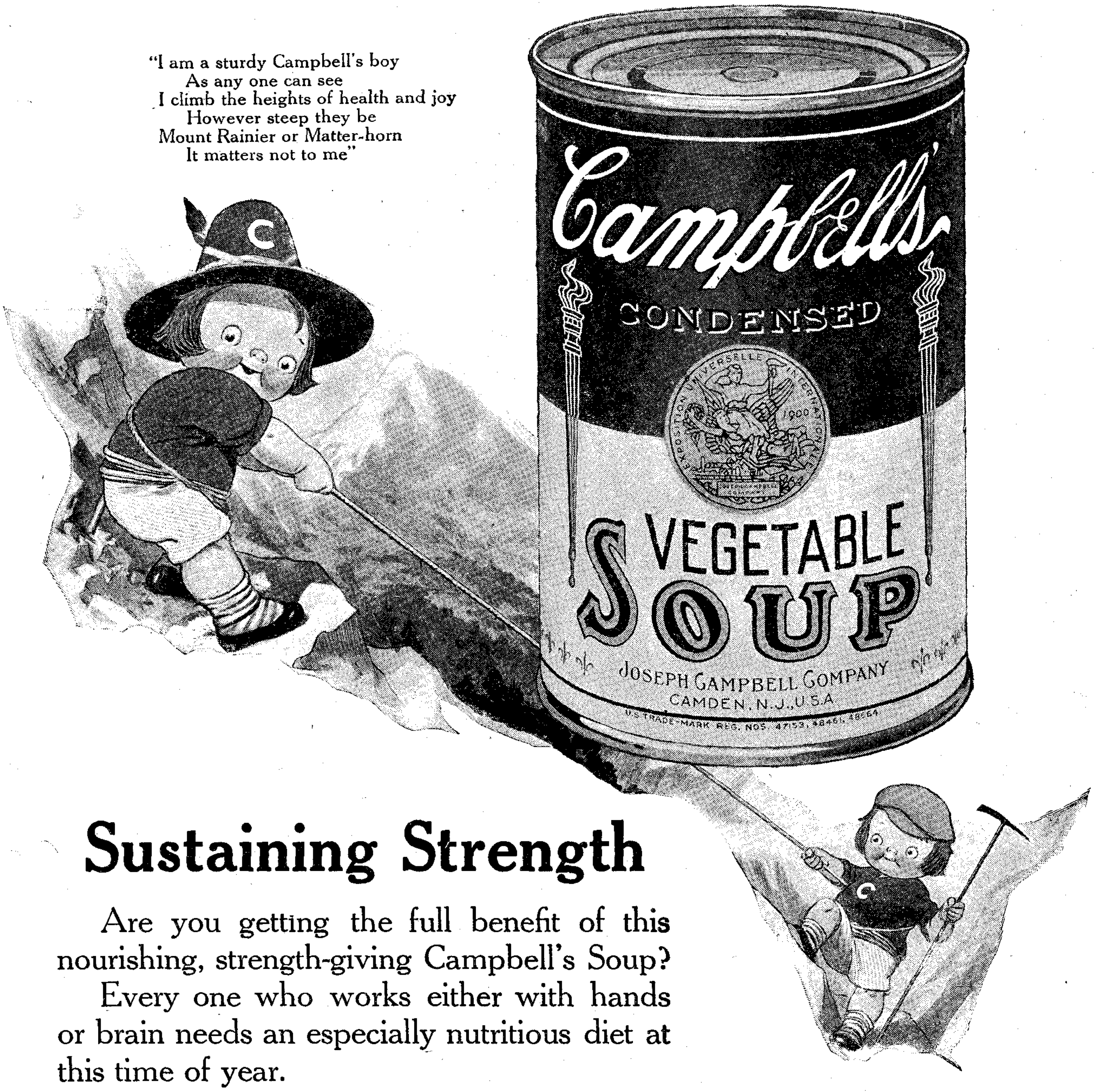
"Francis Scott Key wrote another hymn besides our national anthem, a fact which is not generally known. The hymn is called 'Lord, with Glowing Heart I'd Praise Thee.'"

CHRISTIANITY AS A SUICIDE CURE.—Suicide, always popular in Japan as a means of solving difficult personal problems, is more rife than ever after the recent financial crisis in the Land of the Rising Sun, according to the Japanese press. The Osaka *Mainichi*, one of the Japanese papers which sees peril to the nation in the prevalence of self-slaughter, is forced to acknowledge the excellence of the Christian view of suicide—as contrasted with that of Eastern religions. The Christian theory is that suicide, instead of being merely an apology for failure, is a crime. That there are so many suicides in Japan is "due to the fact that the Japanese have less attachment to life than foreigners, and to the tradition in feudal times, when Japanese belittled the importance of life." The problem is serious, and "ought to be studied by all who desire to see the moral ideal of the people reconstructed." Referring to the custom of resorting to suicide in order to evade responsibility, this journal says that this "way of thinking of the Japanese is entirely wrong," and argues:

"Death—much more suicide—means evasion of responsibility. Unless the 'apologizing by death' morality, so common in feudal times, is done away with, it is impossible to hope for a healthy development of society and for the real prosperity of the state. The notion that those who commit suicide have the keenest sense of responsibility is wrong. Facts prove that the suicide has the least sense of responsibility. Suicide is an embodiment of egoism and irresponsibility.

"One of the strong points of the Christian people is their conviction that suicide is a crime. To kill oneself is as criminal as to kill others. The notion that one is absolved from responsibility by death is an anachronism."

"I am a sturdy Campbell's boy
As any one can see
I climb the heights of health and joy
However steep they be
Mount Rainier or Matter-horn
It matters not to me"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Are you getting the full benefit of this nourishing, strength-giving Campbell's Soup?

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Campbell's SOUPS

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CURRENT-POETRY

POETRY has descended from father to son, but the instances must be rare where it has ascended from son to father. The following from *The Irish Statesman* (Dublin) is a case in point. If this is not the first poem of J. B. Yeats, father of William B., it certainly has not many predecessors unless they be found merged in the poems of the famous son. The same power of fancy, if not the metrical skill, is revealed here. Mr. Yeats told a friend that when he sent the poem to his son, "W. B." replied that "to remove the jolts might spoil the intensity," and the elder dispatched the poem to the paper with the comment that "at least it has the merit of intensity."

TARDY SPRING

(A warning to bachelor maidens)

By J. B. Yeats

Sleepy head, sleepy head, awake and begone
From under the leaves of dead yesterday,
The leaves snug and warm where you lay—
Stop from complaining, and put away moan,
Cast away sleep and dry up your tears,
And weave, weave,
The green mantle that great Summer wears.

Thus spake old Winter and yelled,
By one hand her wolf she held.

What if I did o'ersleep, said Spring.
Am I not Spring? and you but a damned old thing—
And waving her arms she floated along,
And the woods and the thickets all broke into song.

Wilful Spring will go her way,
Her feet she will not stay.
The torrid heat that dries the rills
And wastes the daffodils,

That changes maid to weary wife
And wakes the married strife
And care that crooks the husband's back—
She gives them all the sack.

Ah, Virgin! dewy-eyed and with a rosy cheek,
What is it that you seek?
Joy and sport, she said, and the far romance
Of love's light chance.

Who is this that cometh through the bright'ning wood?
Hark to her soft footfall—
It is my lady love, the lady of one mood
Who doth the world enthrall.

Slowly she comes and folds beneath her breasts
The burden of the childing mood;
All around are the swaying nests
And the breathing of the wood.

Soft airs that wait upon her
And come to do her honor
Are a whisper from a star
Quelling tumult and each jar.

The sun climbs into the azure
Dropping his golden treasure.
Undulant go the sated hours,
Silence hangs upon the sated hours,
Spring lies dead among the flowers.

Best beloved of all young composers is the German lyric, which gets this new rendering in *The Westminster Gazette* (London). As this version sings itself, any musical accompaniment may be deemed superfluous:

DU BIST WIE EINE BLUME

(Version)

By Humbert Wolfe

You have the way of a blossom,
Cold petal with April green,
And you melt the heart in the bosom
As your beauty enters in.

I will fold my hands together,
Asking of God for you
Always in April weather
Cold petal and colder dew.

A piled-up indictment is to be found in this verse from *Life*. Who the guilty party is we will leave for our readers to find in the last line. Their progress there will be rendered easy by the graceful accumulation of evidence:

RHYTHM

By Arthur Lawrence Bolton

Rhythm is Life's undertone;
Through it we live, and it alone.
The vibrant rhythm of the breeze
Makes the music in the trees,
And in the rushing cataract
Keeps the wave-crests curling back.
We find the rhythm of the night
In the Aurora's pulsing light,
And in the surging of the sea

Is rhythm present constantly.
For those who heed there is no lack;
The speeding train upon the track,
The purring engines on the deep
An ever-throbbing rhythm keep.
In song and laughter, it is there,
In sleep and in the fervent prayer,
And in the legion's thund'rous tread
It shakes the foe and stirs the dead.

It is the pulsings of the heart
That ecstasies of love impart;
The ceaseless swinging of the tides,
By which our very life abides.
When rhythm dies, then we are dead,
As Luna who no light can shed.
Pray tell me, then, what can be worse
Than pulseless stuff they call free verse?

A tendency is shown here and there in the magazines to dignify poetry somewhat above the position of "filler," so long the grief and shame of poets. *Scribner's* (August), following other examples—one long set by *The English Review*—groups its verse in a seven-page section. Two of the shorter of these are fraught with seasonal suggestion:

CLOUDS

By John Jay Chapman

When I have lain an hour watching the skies,
With oaken boughs above my grassy bed,
An ocean seems to open on my eyes,
With ships becalmed that linger overhead
As if their motion was a kind of rest;
And argosies I see and navies brave
With flame of flags and pomp of pennons drest,
Trailing their splendors through the colored wave.
Triumphant galleons, freighted to the rail,
Lean toward their harbors with extended sail.
Whither, ah, whither all that wealth and worth,
That sky-borne booty floating toward a bourne
Beyond all ken, beyond all touch of earth?
And we—that steer and tack, struggle and mourn
To win a point or round a promontory,
Nursing the shore and angling with the wind,
To gain a tinsel, quaint, ephemeral glory,
And leave a fortune or a name behind—
Are drifting toward some goal insensibly,
Like those slow-moving treasures of the sky.

A BARNEGAT LOVE-SONG

By Ethelean Tyson Ga

I never race the sunrise
To stand beside the sea,
But that the dawn-lit glow of it,
The rosy, dimpled flow of it,
Is telling, love, of thee.
A dimpling sea, a smiling sea,
That flushes mile on mile!
And, oh, the flower-sweet gleam of it,
The thrill and mystic dream of it—
It's your own lips I'm thinking of,
Your rosy, dimpled smile!

I never stand at noonday
Beside the summer sea,
But that the crystal blue of it,
The radiant, sky-kissed hue of it,
Is telling, love, of thee.
A changeless sea, a tender sea,
So wide and deep and true!
And, oh, the healing balm of it,
The magic, jeweled calm of it—
It's your own eyes I'm thinking of,
Your own dear eyes of blue!

I never stand at evening
Beside the sunset sea,
But that the flaming leap of it,
The purple-misted sweep of it,
Is telling, love, of thee.
A royal sea, a flaming sea,
And rainbow fires above!
And, oh, the glory-light of it,
The far-flung, deathless might of it—
It's your own heart I'm thinking of,
Your golden heart of love!

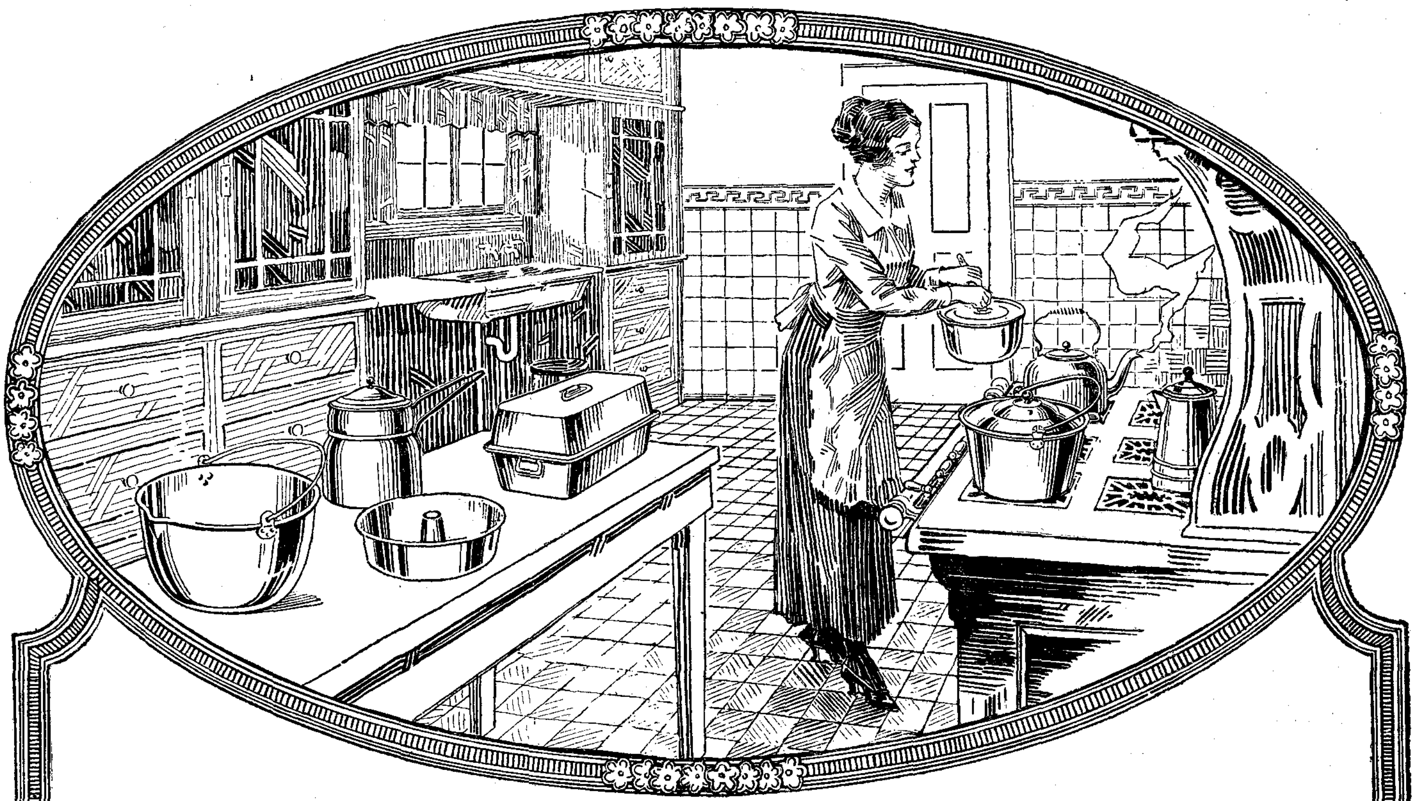
Old New England will be much in men's thoughts as November and the Pilgrims' tercentenary draw on. Puritanism will doubtless be drawn in its somber tints, so this glint shed in the New York *Tribune* will not come amiss as a corrective:

VILLAGE NOCTURNES

(The Congregational Meeting-House)

By Walter Prichard Eaton

The moonlight bathes the old white church
From paneled doors to gilded weather-vanes,
Deepening with shade the cool restraint
Of hand-wrought classic ornament,
And making exquisite the sweep of roof
With shingle shadows like dim moss.
Upon a rise it stands,
Above the village green,
And now, at midnight while its high clock booms
(I hear the hammer creak for every blow),
It seems a great white ship
Full-poised for lifting flight.
Ghost of the days when perfect line
And just proportions and chaste ornament
Were seemly in the eyes of simple men!
Ghost of the days when your eight hundred seats
Were filled on every Sabbath morn!
Ghost not of what was terrible and bleak,
Not of dark fear and lust to persecute,
But of clear faith and courage
And the upright heart!
Ghost of the vanished grace
Of old theologies!



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brightens the many hours the average woman spends each day in that important room.

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Replace utensils that wear out
with utensils that "Wear-Ever"

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Write for free booklet "The **Wear-Ever** Kitchen" which
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In Canada "Wear-Ever" utensils are made by Northern Aluminum Co., Ltd., Toronto, Ont.

WORLD-WIDE TRADE FACTS

GOLDEN BUTTER AND GOLDEN DOLLARS

A Comparison of Dairy Products and Their Growth in the United States

(From *The Northwest Farmstead* (Minneapolis). Estimates by the United States Department of Agriculture)

THE RAPID DEVELOPMENT of the dairy industry in the United States, together with its place in the commerce of the different States and of the nation, is treated in a series of statistical reports, condensed and summarized herewith.

COMPARISON OF THE TOTAL DAIRY PRODUCTION IN THE FOUR LEADING DAIRY STATES

The figures given represent 1918 production and are from the latest available reports. Notice that Wisconsin leads in total production and cheese production. New York, second State, leads in fluid milk, condensed and powdered milk, and ice-cream production. Minnesota, third State, leads in creamery butter; Iowa, fourth State, leads in farm dairy butter.

TABLE I—FIGURES TAKEN FROM REPORTS OF STATE DAIRY FOOD AND MARKET DEPARTMENTS

	Wisconsin	New York	Minnesota	Iowa
Total Dairy Production	$221,659,813	$208,084,590	$133,792,951	$119,248,831
Total Creamery Butter	49,649,391	7,005,564	63,467,653	38,806,989
Creamery By-Products	3,564,550	....	50,000	....
Farm Butter	3,896,715	....	2,474,105	30,978,552
Farm Cheese	231,347	....	21,200	....
Factory Cheese	76,248,547	14,800,996	1,640,054	118,980
Cheese Factory By-Products	271,112	218,723	....	....
Market Milk and Cream	36,181,996	98,338,854	23,981,914	31,410,000
Ice-Cream	1,534,572	33,336,441	2,083,476	5,513,997
Condensed and Powdered Milk	22,815,694	53,168,023	312,000	420,313
* Skim-milk, Whey, Buttermilk, etc.	27,265,889	259,059	39,762,549	12,000,000
Other Dairy Products	....	956,930	....	....

NOTE—1920 estimates by United States Department of Agriculture of total production in 1919 are as follows:

Wisconsin, $277,583,000; New York, $220,000,000; Minnesota production figures are being compiled by the Dairy and Food Commissioner, and show a large increase both in production and price over the 1918 figures; Iowa, $185,172,712.

* This table shows clearly the importance and value of the skim-milk, whey, and buttermilk, the by-products of the creameries and cheese factories. These are produced at a cost of practically nothing, as the profits are made from the manufactured products, butter and cheese. Yet they have high feeding value when fed to young stock, pigs, and poultry. These by-products were largely responsible for the great gains of dairy cows, swine, and other live stock in the butter- and cheese-producing States during the last decade and also during the war, because they replaced high-priced grain feeds to a large extent. Notice their large value in Minnesota, $39,762,549, and in Wisconsin, $27,265,889, where butter and cheese predominate, by comparison with New York, only $259,059, and in Iowa, $12,000,000. Both the latter States have lost dairy cows heavily during the war and since 1910, while Wisconsin and Minnesota made the largest gains in the country.

TABLE II—PRODUCTION OF CREAMERY BUTTER IN THE UNITED STATES FOR THE YEAR 1919

State	Rank	Total Pounds Manufactured, 1919	Percentage Increase or Decrease Over 1918
Minnesota	1	133,059,683	+ 6.62
Iowa	2	87,914,633	+ 2.31
Wisconsin	3	85,054,334	+ 4.23
California	4	61,795,295	+ 8.30
Ohio	5	60,573,159	+12.55
Nebraska	6	60,467,056	− 2.70
Michigan	7	45,206,770	+ 5.19
Indiana	8	44,658,534	+10.95
Illinois	9	44,621,358	+12.10
Missouri	10	38,411,403	+26.67
Kansas	11	35,642,291	+ 4.10
Washington	12	18,486,591	+12.73
South Dakota	13	17,478,570	− 5.97
North Dakota	14	14,696,566	+24.28
Oregon	15	14,431,827	− 1.83
New York	16	13,715,704	+ 5.50
Colorado	17	13,144,464	+ 4.66
Pennsylvania	18	12,445,578	+18.93
Vermont	19	10,676,538	+ 6.02
Oklahoma	20	10,481,270	+31.39
Texas	21	8,288,644	+68.99
Montana	22	5,389,032	+16.08
Kentucky	23	5,321,139	+83.59
Idaho	24	4,514,263	+10.41
Utah	25	3,796,394	− 5.31
Tennessee	26	3,735,157	+57.07
Massachusetts	27	2,849,270	+13.23

TABLE II—*Continued*

State	Rank	Total Pounds Manufactured—1919	Percentage Increase or Decrease Over 1918
Mississippi	28	2,476,787	+20.35
Nevada	29	1,725,494	+18.88
Virginia	30	1,597,340	+23.82
Maine	31	1,140,850	−20.50
Wyoming	32	1,139,556	− 3.30
Arizona	33	1,000,118	−31.42
Connecticut	34	929,551	+16.76
North Carolina	35	829,286	+29.42
Alabama	36	696,215	−25.40
New Hampshire	37	397,198	−13.24
Arkansas	38	363,384	−85.22
West Virginia	39	328,160	+74.16
Maryland	40	315,307	+25.90
Delaware	41	253,286	− 4.94
New Jersey	42	178,796	+34.03
Rhode Island	43	65,392	− 6.59
Louisiana	44	46,409	−30.13
South Carolina	45	26,580	+19.67
Florida	46	16,755	−33.07
Georgia	47	5,802	+66.90
New Mexico	48	5,673	−46.44
District of Columbia	49	5,375	+13.59

Seventy-six per cent. of all the dairy cows in the United States are in the following twenty-one States: Wisconsin, New York, Minnesota, Iowa, Texas, Ohio, Illinois, Pennsylvania, Kansas, Missouri, Michigan, Indiana, Nebraska, California, Mississippi, South Dakota, Oklahoma, Alabama, North Carolina, Georgia, and Montana. The total number of cows in these States increased from 15,916,772 in 1910 to 18,228,000 in 1920. In the United States as a whole during the same period the total number of cows increased from 20,625,432 to 23,747,000. Since 1910 Wisconsin has supplanted New York as the first dairy State, and Minnesota has supplanted Iowa as third State.

TABLE III—INCREASE OF HOGS AND CATTLE, 1910–1920, IN IMPORTANT DAIRY STATES

	Hogs Gained Since 1910	Total 1920	Cattle (other than dairy cows)	
			Gain Since 1910	Total 1920
Minnesota	1,430,743	2,951,000	467,953	1,730,000
Wisconsin	426,669	2,236,000	286,431	1,493,000
North Dakota	96,397	428,000	132,411	617,000
South Dakota	720,279	1,730,000	360,488	1,526,000
Montana	60,739	160,000	70,380	936,000
Iowa	2,843,147	10,389,000	*266,214	2,775,000
New York	253,821	920,000	*4,409	909,000
Illinois	636,638	5,323,000	*100,354	1,290,000
Ohio	1,245,373	4,351,000	180,518	1,113,000
Pennsylvania	442,363	1,420,000	74,121	727,000
United States gain	14,723,324			
United States gain	....	....	3,306,566	

* Loss

TABLE IV—GAINS AND LOSSES, HOGS AND CATTLE, 1917 AND 1918, IN IMPORTANT DAIRY STATES

Estimates furnished by the United States Department of Agriculture)

	Hogs Gained	Hogs Lost	Cattle Gained*	Cattle Lost*
Minnesota	709,000	......	232,000	....
Wisconsin	121,000	......	96,000	....
North Dakota	....	194,000	....	38,000
South Dakota	222,000	......	246,000	....
Montana	....	69,000	20,000	....
Iowa	1,555,000	......	107,000	....
New York	55,000	......	....	28,000
Illinois	1,280,000	......	116,000	....
Texas	....	909,000	....	1,521,000
Ohio	739,000	......	202,000	....
Pennsylvania	246,000	......	67,000	....
Kansas	....	154,000	201,000	....
Missouri	633,000	......	132,000	....
Indiana	698,000	......	45,000	....
Nebraska	50,000	......	415,000	....
Michigan	10,000	......	....	1,000
United States gain	8,084,000	......	....	....
United States gain	....	......	2,710,000	....

*Other than dairy cows.

Organization — Equipment — Knowing-how Produces the new Leland-built Lincoln Car

In this day of big things, what more magic words than these: 'Organization,' 'Equipment,' 'Knowing-how'?

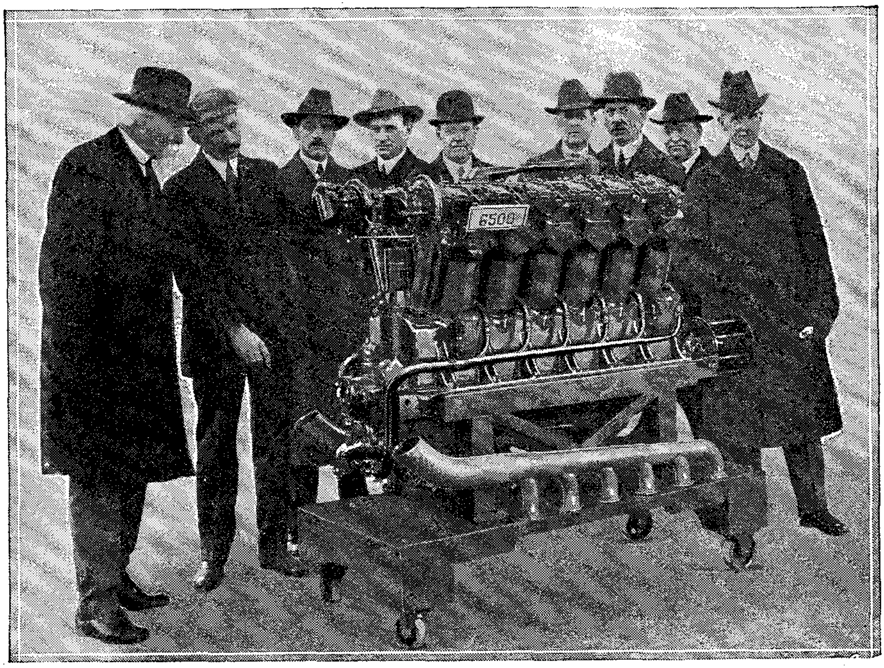
Without them is nothing great accomplished.

With them, nothing seems impossible.

Many are the stories of vast achievement in the world mechanical; among them is a story not widely known, yet a story for whose parallel you would seek far to find.

In order to understand the possibility of that achievement, let us hark back some thirty to forty years.

Then, Henry M. Leland was a conspicuous figure in New England's higher Craftsmanship.



Henry M. Leland, Wilfred C. Leland and some of their Chief Associates, viewing the 6500th Lincoln Liberty Aircraft Motor

Of these nine men, seven have been in continual relation for 12 years; five for 21 years and three for 27 years

A Duplicate of this Motor is now in the Smithsonian Institution at Washington, D.C., where it will stand for all Time, a Monument to and an Example of the world's finer Craftsmanship

Some years before, he had left his boyhood home on the farm in Vermont, and gone to Worcester, Mass., where he engaged as an apprentice. He became a workman at the bench, but not for long, because he soon compelled recognition as an artisan of an uncommon kind. He showed an ability to do things—to do them differently, and to do them better than they had been done before.

He became a machinery salesman, and an unusual one, because he was more than a salesman.

He knew, too, how to install and to teach the operating of the machines he sold.

Manufacturers sought his counsel. They engaged him to re-organize their equipment and their men.

He knew how to increase production, not by oppressive, but by progressive methods. He did two more things, which to those who do not know him and his methods, may seem anomalous or impossible—yet he did them.

Besides increasing volume, he actually reduced production costs, and at the same time bettered infinitely the quality of the things produced.

He had a knack and a penchant for doing things while others were saying they could not be done. His was supreme delight to bring order out of chaos.

Many are the great establishments today which owe the foundation of their prestige and their success largely to the organizing, producing and quality-building genius of Henry M. Leland.

He is credited with a multitude of 'crowning achievements,' because he has made it a life principle always to do things better than they had been done before.

His generalship in organization is strikingly exemplified in that of the Lincoln Motor Co., although he maintains that Wilfred C. Leland who has been his mainstay and close associate for many years, assumed a large share of the responsibilities; and to its success he also attributes the loyal, skillful and effective co-operation of his thousands of other associates.

In the year 1890 the Lelands came from New England to Detroit, where for a number of years they engaged in the manufacture of the finer kinds of machinery and precision tools. They were among the pioneers in the making of gasoline, marine and automobile engines; and after eighteen years, many of those engines are still in service—a tribute to the Leland ways of doing.

Shortly after our country became involved in the world conflict, the vital need for aircraft so forcibly impressed itself upon the Lelands that they severed their many years' affiliation with the motor car industry in order that they might undertake the production of Liberty airplane motors for the allied fighting forces. This they did in July, 1917.

With absolutely nothing in the way of plant or equipment, they received the government's first award for the building of these motors—and faith in the men and their ability was the government's sole assurance.

Capital was interested, and much volunteered. The Lincoln Motor Co. was formed. Fifty-two acres of land were acquired. An adequate plant was erected and equipped in record time. A vast amount of machinery was designed, built and installed. Tools to the extent of 6,522 separate and distinct designs, aggregating 91,807 in number, were made.

Thousands of America's most skilled craftsmen tendered their co-operation and their services. Many of the men, particularly the executives, were men whom the Lelands knew and who knew them, through many years' association; and they were anxious to enlist under their banner.

Never in their lives, say the Lelands, have they seen such a vast organization get into working harmony with so little delay and so little friction.

The efficiency of that organization can best be appreciated when it is realized that in seven months and three days after starting with nothing, they assembled their first motor. In ten months thereafter, and with 6,000 employees, the Lincoln Motor Co. was producing at the rate of 50 motors per day. In contrast with these Leland methods, the leading English manufacturer, with three years aircraft experience and 10,000 employees, had required a week to produce the quantity of motors which the Lincoln organization had produced in a single day.

Within eleven months from the day production of completed motors began, the Lincoln Motor Co. had established the record of producing the largest number of motors in a day, the largest number in a month and the largest total produced by any manufacturer from the beginning; and those who know the story of Liberty motor building know the rivalry for that record.

The quality of Leland-built Lincoln Liberty motors has been attested by tributes and in ways which could not be misunderstood; and, too, the Lincoln Motor Co. was able to render assistance of immeasurable value of those less favorably schooled.

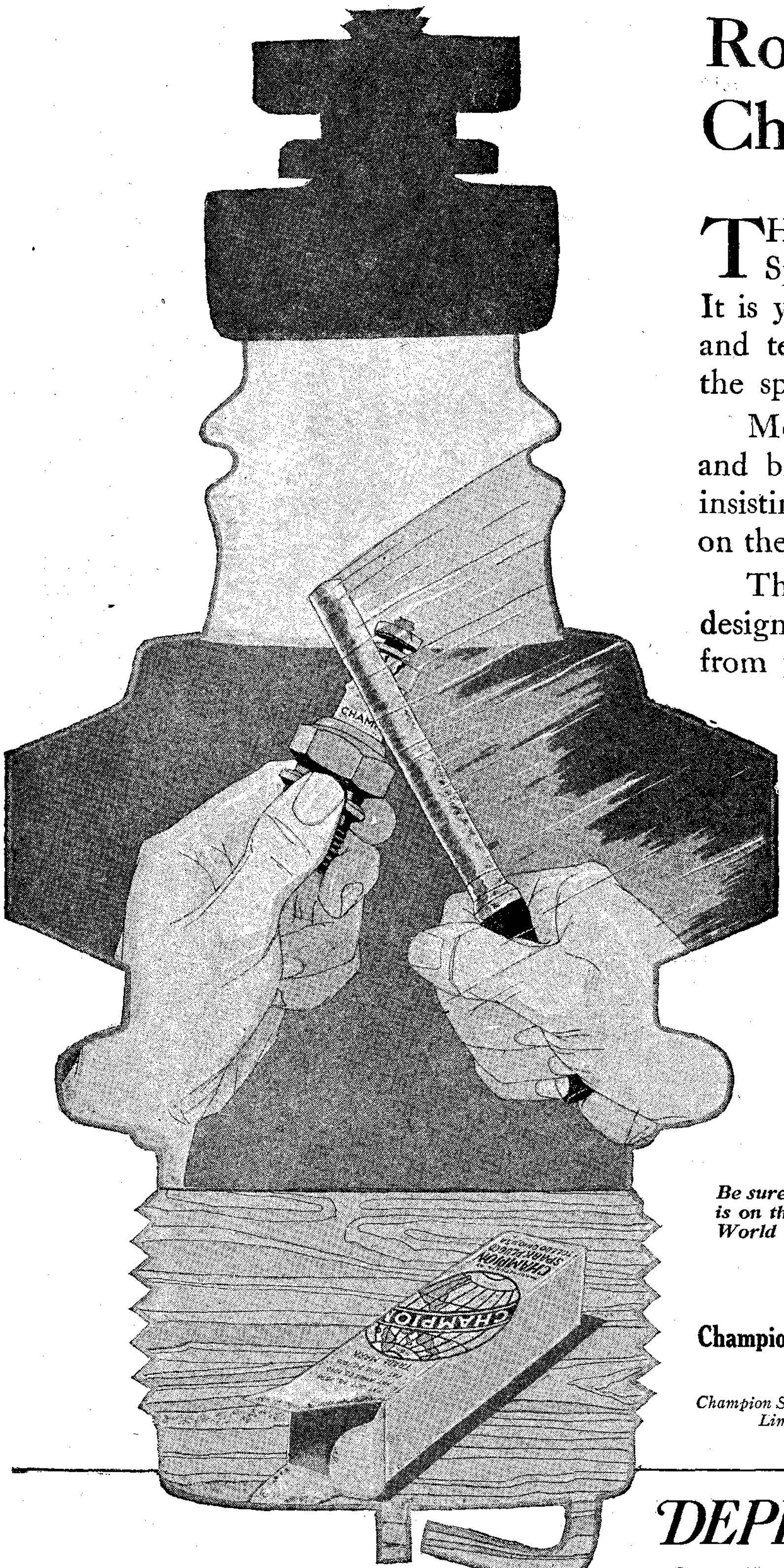
Assembling and harmonizing an organization expeditiously, for doing things in a big way and doing them right, is, like everything else—no matter how difficult it may seem—a plain, simple matter of 'knowing-how.'

This is simplified when the executive and his chief assistants in things mechanical, can go into the shops, and with their own hands perform practically every task and operation, from the ground work to the finished product.

Such is the skill and genius; such is the organization that is producing the new Leland-built car—the car destined to chart the future course of fine car making—the car destined to prove another 'crowning achievement'—the car destined once more to demonstrate Leland determination and Leland ability to surpass.

LINCOLN MOTOR CO., DETROIT, MICH.

Champion



Rough Treatment But Champions Will Stand It

THE famous No. 3450 Insulator in Champion Spark Plugs resists this severe test perfectly. It is your safeguard against the shocks, vibration and temperature changes that constantly attack the spark plugs in your engine.

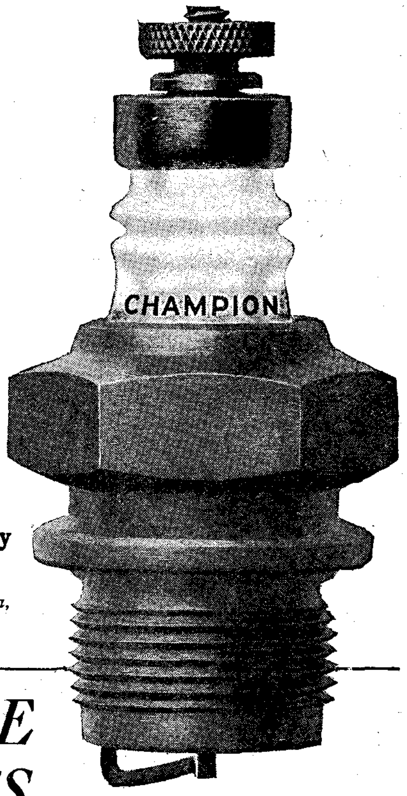
Most spark plug troubles come from cracked and broken insulators—avoid these troubles by insisting upon the plug with the name "Champion" on the Insulator.

There is a Champion Spark Plug specially designed for every type of engine. Order a set from your dealer today.

Be sure the name Champion is on the Insulator and the World Trade Mark on the Box.

Champion Spark Plug Company
Toledo, Ohio

Champion Spark Plug Company of Canada, Limited, Windsor, Ontario



DEPENDABLE SPARK PLUGS

PERSONAL · GLIMPSES

SOME OF THE MEN BEHIND THE BOAT THAT WON

"THE BEST BOAT WON," said Sir Thomas Lipton, bearing up spunkily under the failure of his fourth attempt to lift the *America's* Cup. "The best boat won," repeated yachting experts throughout most of the civilized world, and nearly everybody agreed. But to a good many "old salts" and others close enough to the yacht-racing game really to see something of its inwardness, it wasn't the best boat that won so much as the best men. The newspaper reporter, looking on from destroyer or airplane, might announce that the *Resolute* went through this maneuver, while *Shamrock* decided on that. To a select few it was Adams or Christensen who really made the move credited to the *Resolute;* it was Nat Herreshoff, her designer, who appeared in the conversation when the Yankee boat "ate into the wind" at a rate which the challenger could not hope to equal. "No one in the world can build a yacht able to equal a Herreshoff boat in windward sailing," is the verdict of those who count on the man as well as the boat. For nearly thirty years the Yankee boat-builder of Bristol, Conn., has been turning out cup defenders, and if "the best boat really won" in the series of races just concluded, it might be quite as true to say that the Yankee designer Herreshoff beat the British expert, Charles Nicholson. According to *Yachting* (New York), the "Wizard of Bristol" is "a grim and silent man who has been likened to Napoleon, 'a sceptered hermit, wrapt in the solitude of his own originality.'" His defense of the *America's* Cup began in 1893, when the British yacht *Valkyrie II.* challenged. To meet her, says *The Scientific American*, in a discussion of the career of the American designer:

GREAT SPORTSMAN AND GREAT SAILING MASTER.

Sir Thomas Lipton, it is reported, invited Captain Chris Christensen, sailing master of the *Resolute*, to one of the functions aboard the *Victoria*, and found the Scandinavian-American sailor so interesting that his other guests were mostly left to entertain themselves.

> Herreshoff designed the *Vigilant*, a sloop with the enormous beam of 26 feet, four feet less draft than *Valkyrie II.*, and with 1,300 square feet more sail. Like all her predecessors, she was a centerboard sloop. In this series of 1893 the British began for the first time to show a speed that compared favorably with our American sloops. In the third race to windward and leeward, *Valkyrie II.* beat the *Vigilant* to windward, but lost by forty seconds on the run home because in the strong wind two of her spinnakers were blown away. The following year, *Vigilant* was taken over to race in English waters, and was frequently beaten by *Britannia*. Hence it is not surprizing that in the series of races of 1895 Herreshoff should have dropt the centerboard and built a yacht which in its profile and cross-section approximated the new and very successful *Britannia* and *Valkyrie* type. His change from centerboard sloop to keel cutter was a logical development from his success in the smaller classes with *Gloriana* and *Wasp*, which anticipated many of the features which characterized the *Valkyrie* and *Defender*.
>
> Just as Herreshoff was influenced by *Valkyrie* in designing the *Defender*, so was Watson, the British designer, influenced by *Vigilant;* for *Valkyrie III.* had the great beam of 26 feet 2 inches, or slightly more than that of *Vigilant*. She had something of the full bilges and shallow hull of the American sloop, and on a displacement of 155 tons spread 13,026 square feet of sail. *Defender* was built with a bronze underbody and aluminum-alloy topsides. She was a remarkably light boat in construction and weight, and on a displacement of 143 tons she spread 12,640 square feet of sail.
>
> For the races of 1899, Fife, a designer of scarcely less distinction than Watson, was selected to design *Shamrock I.;* and to meet her Herreshoff turned out the *Columbia*, probably his most successful yacht. In the next series of 1901 Watson was called in to design *Shamrock II.*, and the wonderful *Columbia*, proving better than Herreshoff's new *Constitution*, was selected once more for the defense of the cup. *Shamrock II.* proved to be by far the best boat sent to this side, as is proved by the small margins by which she lost the 1901 series. It is the opinion of many American yachtsmen that her failure to take the cup was due to poor handling in the races. In 1903 Fife was called in again, and he turned out one of his characteristically beautiful boats with a very sweetly turned and admirably proportioned hull—a powerful craft spreading 14,337 square feet of sail. To meet her, Herreshoff, influenced no doubt by the great speed shown by *Independence* with her scow-shaped hull, built a most extreme boat, the *Reliance*, which on a water-line length of 89 feet 8 inches showed a total length of deck of 145 feet, and spread the enormous area of 16,169 square feet of sail. *Shamrock III.* made a good fight for the cup.
>
> For the 1920 series, it was agreed that, for the sake of economy and all-round convenience, the length of challengers and defenders should be restricted to 75 feet on the water-line. The two boats were built under a rule which aims to prevent such extreme racing craft as *Reliance* and *Shamrock III.* A premium is put upon displacement, and a heavy tax upon the sail and upon shallow-bodied, full-ended boats of the *Reliance* type. Herreshoff, in *Resolute*, turned out a small boat that aimed to get every advantage possible from the rule. Nicholson, on the other hand, accepted the penalties of the rule, particularly as regards sail area, of which his *Shamrock IV.* carried about twenty per cent. more than the defender, *Resolute*.

Most of the credit for the *Resolute's* victory is given, even by those who are content to observe that "the best boat won," to the clever amateur skipper, Charles Francis Adams, second, treasurer of Harvard, who maneuvered the defender so skilfully that a landlubber has difficulty in understanding even what he was about. A detailed account of his life and achievements appeared in the "Sports and Athletics" Department of *The Digest* on July 24, under the heading "The Education of Skipper Adams." The July issue of *Yachting* pays him this brief tribute:

> In Boston waters we find a yachting center the fame of which is unsurpassed in the whole country. They are skilled yachts-

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THE AFTER-GUARD OF THE CUP DEFENDER.

Charles Francis Adams, 2d, skipper, is seated at the extreme right. The others are, in order from his right, George A. Cormack, Robert V. Emmons, 2d, John Parkinson, and Arthur Adams.

men, these New-Englanders, born to the sea. To qualify as one of them is an accomplishment of no mean proportions. And one of the men who have graduated with flying colors from this rigid New England schooling is Charles Francis Adams, 2d, skipper of the *Resolute*.

The story of Adams's life is notable for several reasons. In the first place, the fact that he is a member of the Adams family of Quincy is in itself something. This notable name has been before the public eye for some years past. It happens that the great-great-grandfather of the skilful skipper of the *Resolute* was John Adams, second President of the United States, and the great-grandfather of the *Resolute's* skipper was John Quincy Adams, sixth President of the United States. All of which is something of a distinction around Boston way—or anywhere else, for that matter.

As a matter of fact, Adams's yachting history is, in its place, about as distinguished as his family history. Adams and boats have been inseparable for a third of a century. He has raced all sizes, from the largest to the smallest, and is such a thoroughgoing yachtsman that he devotes as much care and interest to the handling of an 18-footer as he does to a boat of cup-race dimensions.

This intense interest in boats began early—probably as a ten-year-old boy puttering around in Quincy Bay catboats. He graduated from Harvard in 1888, and presently he and his two brothers proceeded to make the Adams family famous yachtsmen as well as respected Presidents. In 1890 the famous Edward Burgess built for the Adams boys the *Papoose*, a 36-footer, which they sailed themselves. This boat met with notable success.

The *Papoose* was followed in 1891 by the *Harpoon*, a 46-footer, and then in due course of events came the *Chinook*, and the sonder boat *Auk*. Unfortunately, the youngest brother died and the other two have carried on the work as owners and skippers and always with great success in both capacities. In 1910 came a second *Harpoon*, a sonder boat which under the skipper-owner's clever guidance won the President Taft Cup in the international series of races with Spain. Last year he put a Marconi rig on an unsuccessful *R*-boat and cleaned up the fleet.

The interest of Charles Francis Adams, 2d, in yachting from first to last has been entirely that of an amateur. At one time he was Mayor of Quincy and he is now treasurer of Harvard University.

Perhaps the most picturesque figure aboard the defender was Capt. Chris Christensen, in immediate charge of the crew. The correspondent of the New York *Times* notes that one of the features of an early contest was "the wild gesticulation" of Chris Christensen. "He shouted and waved to the small and rule-observing fleet of following craft," observes the correspondent, who appears to have been among those shouted at, "to give the *Resolute* more room, as if she needed the entire ocean, and he owned it." For some thirty years Captain Christensen has been sailing the seas along the American coast. His knowledge of the waters in which the race was sailed is said to be more complete than that of any other man afloat. Besides, he was born a Scandinavian, as were all of the *Resolute* crew, from Christensen down. As *Nordisk Tidende*, a Norwegian paper published in Brooklyn, points out, it is only natural that Scandinavians should be the best sailors. Even tho all of them are American citizens, and their leader, Captain Christensen, has been a resident of this country for thirty-seven years, the Norwegian paper suggests that their skill and seamanship is no doubt an inheritance from the seafaring race that were their ancestors. The story of an English gardener is called in point. To prepare a beautiful lawn, the gardener told an American tourist, "you get your ground in good shape, and you sow your seed and then you cut your grass for three hundred years." So Scandinavian seamanship, we are told, is the result of training for three or four times as long as America has been known by the rest of the world. For years American cup defenders have been manned by Scandinavian crews. Lord Dunraven, when an unsuccessful challenger for the America's

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THE SCANDINAVIAN-AMERICAN CREW OF THE *RESOLUTE*.

Nearly every report of the race contained somewhere a mention of their superiority to the *Shamrock's* sailors in handling the great canvas wings upon which modern racing yachts depend for their speed.

Stewart
MOTOR TRUCKS

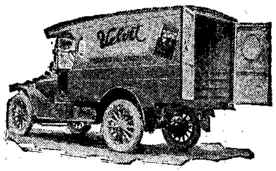
Eight Years of Rapid Growth Prove Stewart Quality and Economy

THIS THE IDEAL: From the start, Stewart designers decided to build only quality trucks; to build them at quantity prices. Trucks from the ground up—not an adapted passenger car part in them; built for work; built to last and pile up profits for owners; hundreds of useless parts and hundreds of pounds of dead weight eliminated; strong, sturdy, hardworking assets to any man or business.

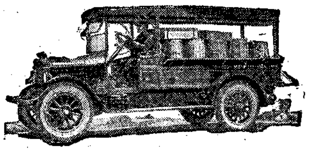
AND THIS THE ACCOMPLISHMENT: In only eight years Stewart has become one of the world's leaders. It has fought the daily battle of business for owners, and won out—because it is a stronger truck, simpler to operate, more economical on gasoline, oil, tire and repair costs. Starting with one on trial, Stewart fleets have grown rapidly—one, two, four, and more—all working and earning; spreading the Stewart reputation for quality and economy. Factory output has been more than doubled this year. Stewarts are in use in 800 American cities, on hundreds of farms, and in 38 foreign countries.

Stewart Trucks have won—By costing less to run

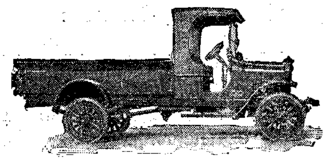
STEWART MOTOR CORPORATION
BUFFALO, N. Y.



1500 lb.



2000 lb.



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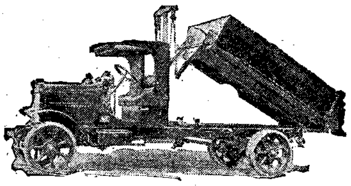

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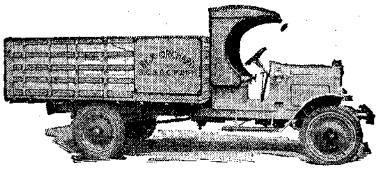

2½ Ton

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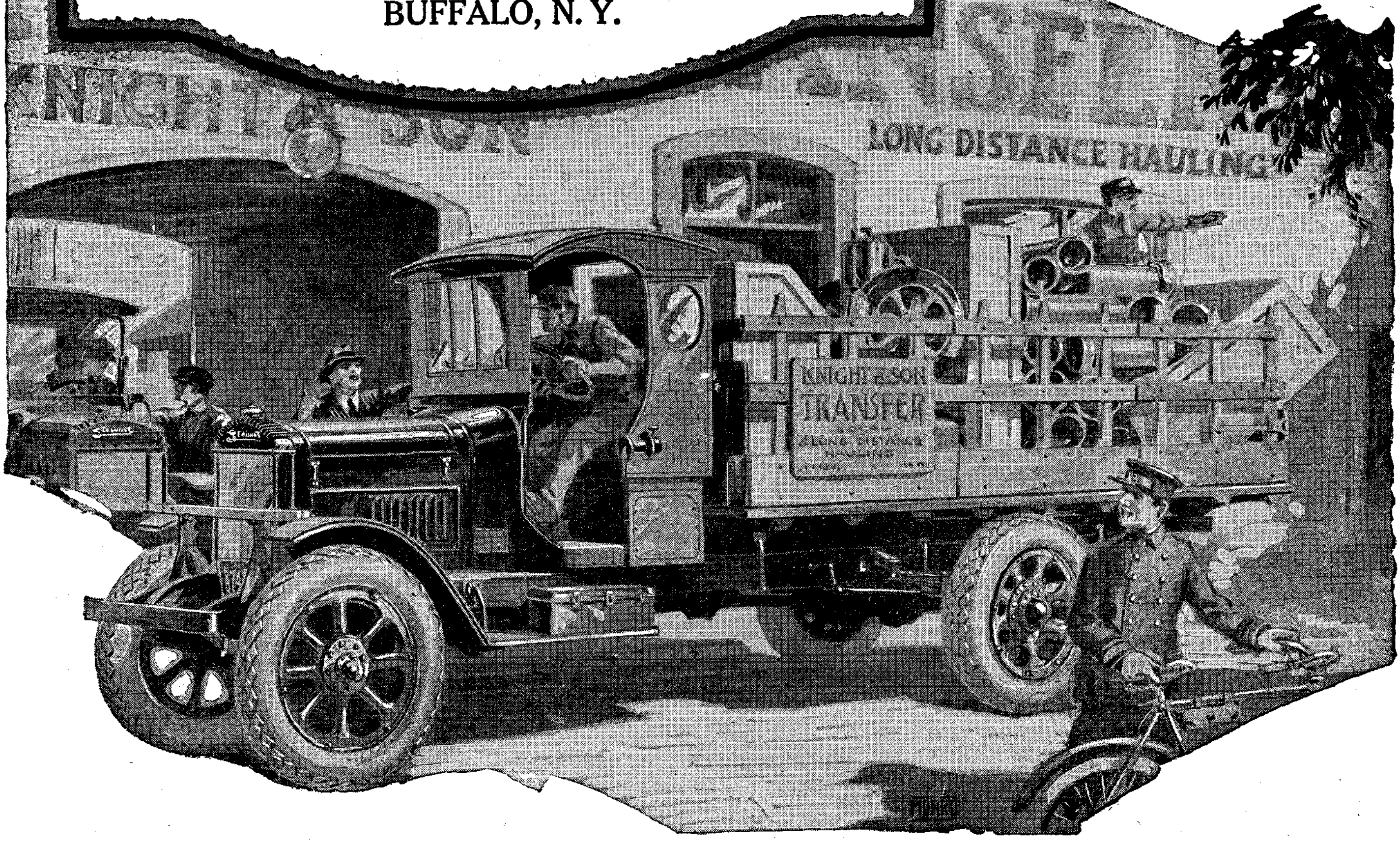

Cup, is said to have objected that the American boat was not manned by Americans, but by Norwegians. Captain Christensen, in response to a query as to why his men were all Scandinavians, is quoted as saying that this was not the result of any special design. "It was merely the object to select the best material that could be found on the Atlantic coast, without reference to nationality," said the Captain. The result showed in every newspaper account that compared the handling of the two racers. *Resolute's* sails were invariably handled more quickly than the challenger's. The Norwegian paper credits the American press with a desire not to advertise the fact that the *Resolute* carried a Scandinavian crew. In the New York *Times*, however, we find the following complimentary account written by H. Sundby-Hansen:

> Members of the New York Yacht Club gave unstinted praise last night to the Norwegian sailing master and crew of the *Resolute*, who brought victory to the American yacht. All agreed that better seamanship in the handling of a racing yacht has not been seen on the Atlantic coast or anywhere else.
>
> Not wishing to detract from the glory of Charles Francis Adams, *Resolute's* amateur skipper, whose performance was masterly throughout the entire race series, members of the club said, nevertheless, that *Resolute's* sailing master, Capt. Chris Christensen, and his able crew were entitled to their full share of the credit.
>
> The entire crew, including Sailing Master Christensen, First Mate John Christensen, and Second Mate Gus Olsen, are Scandinavians, all American citizens. Of these, Sailing Master Christensen, the two mates, and nineteen of the crew are Norwegians, seven are Swedes and one hails from Denmark. To complete the list of the Norsemen who aided in bringing another victory to America, the club's racing superintendent, Capt. Louis Blix, is an old Norwegian salt. It was Captain Blix's duty to lay out the course for the competing craft and determine the sailing distances.
>
> Sailing Master Christensen is a seasoned racing skipper and a typical man of the sea. He is fifty-six years old, and came from Arendal, Norway, in 1882, already at that time an experienced sailor. Since then he has taken part in numerous national and international yacht-races on the Atlantic coast in America and in European waters, until now he is probably the best-known yacht skipper on the Atlantic coast. With practically the same crew, Captain Christensen won the last yacht-race for America against *Shamrock III.* in 1903.
>
> No man knows wind and weather conditions on the Atlantic coast better than Christensen. He is said to be endowed with an almost uncanny intuition as to wind and weather, and can "nose" a breeze or a big blow miles off. He is a medium-sized, close-knit man, with real sea-legs and a bronzed face as weather-beaten as the rock-ribbed coast off old Norway. Quiet, almost taciturn, he never loses his head under the most trying circumstances. He took victory as tho it were an every-day occurrence with him to win an international yacht-race for the *America's* Cup.
>
> "I never had any doubt about our ability to win," said Captain Christensen. "Of course, we had the better boat. Since you ask, I will say without intending to be boastful, that I had the honor to pick the best crew of yacht sailors on this coast. But I want to add to that that Sir Thomas Lipton's crew on *Shamrock IV.* are as splendid a lot of sailors as I have seen in many a day. It would have been no dishonor to lose to such a crew."
>
> Sir Thomas Lipton joined with members of the New York Yacht Club in praising *Resolute's* sailing master and his men.
>
> "Their performance was splendid throughout," said Sir Thomas. "Not one word of criticism can be directed against them. Such sailors are born. Their conduct at every stage of the race series, their maneuvers at critical junctures, and the precision of their work were something to marvel at."
>
> Captain Christensen lives at 646 Forty-fourth Street, Brooklyn.

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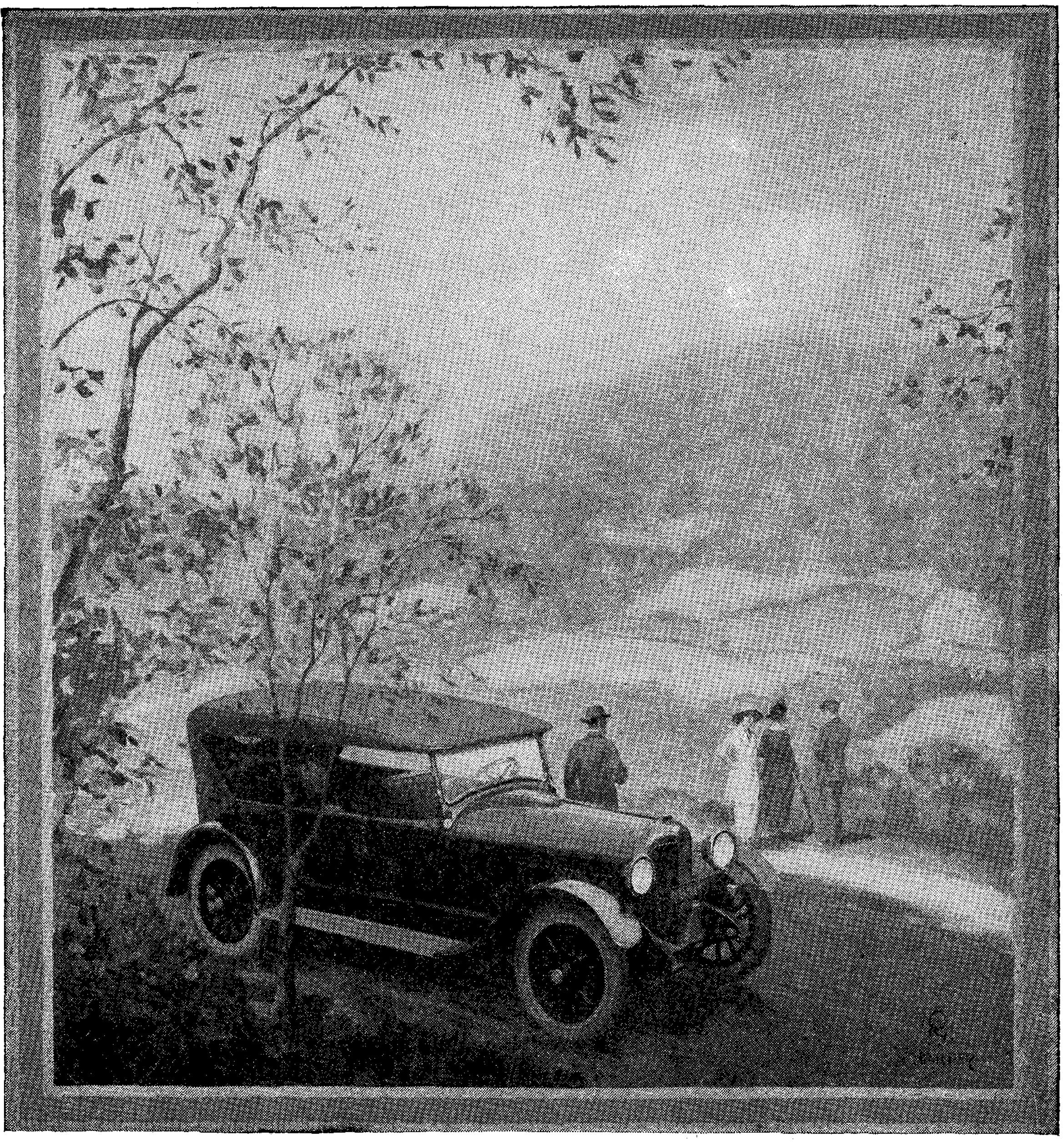
"THE WIZARD OF BRISTOL."

Nathaniel Herreshoff (pointing) has been designing cup defenders for the past thirty-three years—and the *America's* Cup is still in America.

WHEN YANKEE COOLNESS SAVED THE MEXICAN GOLD RESERVE

AN AMERICAN, Bruno Newman by name, is credited with having saved the gold backing up the Mexican paper currency when the Mexican Government moved on the evening of May 6. He did it by the simple expedient of pretending he didn't know the combination to the vault where the gold reserve was kept. As a result of Newman's bravery and presence of mind, it seems, the paper money now in circulation in Mexico is good and the gold to back it up is safe in the vault of the Monetary Commission. Mr. Newman has lived in Mexico for fifteen years, being the head of one of the best-known exporting and importing houses of Mexico City. He is held in high esteem in Mexican business circles and has for years been on the executive committee of the Confederación de Camaras de Comercio de los Estados Unidos Mexicanos, the Mexican chamber of commerce. Last year the Mexican Government, to meet a dearth of silver coin, proposed to put out an issue of paper money. The officials asked the Confederación de Cámaras de Comercio to back this issue, which the latter promised to do on condition that the Government would each day deposit in the vault of the Monetary Commission an amount of gold sufficient to protect that day's issue of paper. The combination of the vault was to be held by one of the Confederación's officers, who happened to be Newman, when the Carranza Government fled from Mexico City. At six o'clock on the evening of the Government's departure a telephone-call informed Bruno Newman that he was wanted by the officials of the Mint. What happened after that is thus related in *The Journal of Commerce* (New York):

> He knew what the call meant, and planned as he walked from his office to the office of the Monetary Commission. There he was ushered into the directors' room, where there were several men and a guard of soldiers. The floor was covered with boxes of gold which were being nailed up and secured with iron straps by laborers.
>
> "We are going to Vera Cruz to-night, as you probably know," said one of the officials, "and we want that three and a half million gold you have in the vault to take with us. We will pay the paper from Vera Cruz. There are twenty-three millions in gold in those boxes you see there, but we want all the funds of the Government."
>
> "Well, gentlemen," said Newman. "This money does not in any sense belong to the Government. It belongs to the people who are holding the paper money outstanding, and I represent the Confederación de Cámaras de Comercio de los Estados Unidos Mexicanos, who are keeping this money as a trust for the people."
>
> The spokesman of the officials stood up. "Here is an order from the Government for the money," said he, "we have no time to argue. Give us the combination or open the vault."
>
> Newman had been through the bloody revolutions of Madero, Huerta, and Carranza, and he knew the things that could happen to an obstinate man at the hands of soldiery such as those who stood there. And he also had a vision of the outcry of the people when they found that they had been tricked and that again paper money, even tho backed by the men of the National Chamber of Commerce, was worthless. He took off his hat and laid it, with his stick, on the table.
>
> "All right, gentlemen," said he resignedly, "it's your responsibility, since you order me to do it. I'll have to get the combination from our clerk back here."
>
> The Cámara had, for the money business, a little office opening on an inside corridor of the Monetary Commission, and



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> Newman walked in there and said to the clerk, "Beat it through that window, quick." The clerk, who knew what was going on, needed only that hint, and he made a dash for his hat and a scramble out of the street-window, and was effaced. Newman walked calmly out through the crowd and a part of the Secret Service men stationed there to watch him and the boxes of gold, and hailed a man whom he didn't know at all, passing in the street.
>
> "Hold on a minute, I want to speak to you." Then he passed out into the darkened street. The officials who wanted that gold were so deceived by Newman's seeming acquiescence that they waited for nearly half an hour before they began to search for him, and when they discovered that he had hoodwinked them, they made up their minds to leave the gold rather than risk the scandal of blowing the safe open. Newman remained in hiding until Obregon and Gonzales marched in the next Sunday at the head of the revolutionaries. Then the officers of the Confederación de Camaras de Comercio held a meeting, with Newman present, of course, and issued a proclamation to the people that the gold for the redemption of the paper was safe and in the vault, and that the paper would be taken up as fast as presented.
>
> Also the 23,000,000 pesos in gold which was shown to Newman in the boxes never did reach Vera Cruz. The revolutionaries captured ten of the fifteen trains that started out from Mexico City Thursday night, and with these ten trains they got eighteen millions of the gold and brought it back to the capital.

THE MAN WHO WILL RUN THE COX CAMPAIGN

THE NEW CHAIRMAN of the Democratic National Committee, ex-Congressman George White, knows men, politics, and several other things literally "from the bottom up." He has seen life from many angles, including the angle available to men who begin at the foot of the ladder. He has "battled his way to wealth and honors," writes one recent interviewer of the Chairman, and now deserves to be called "a winner of the blue ribbon in finance, politics, and also in matrimony." White has "gone through the mill," according to a special dispatch from Columbus, Ohio, to the New York *Times*. He knows what it means "to be knocked about and to have to make a stern fight for success." According to this account:

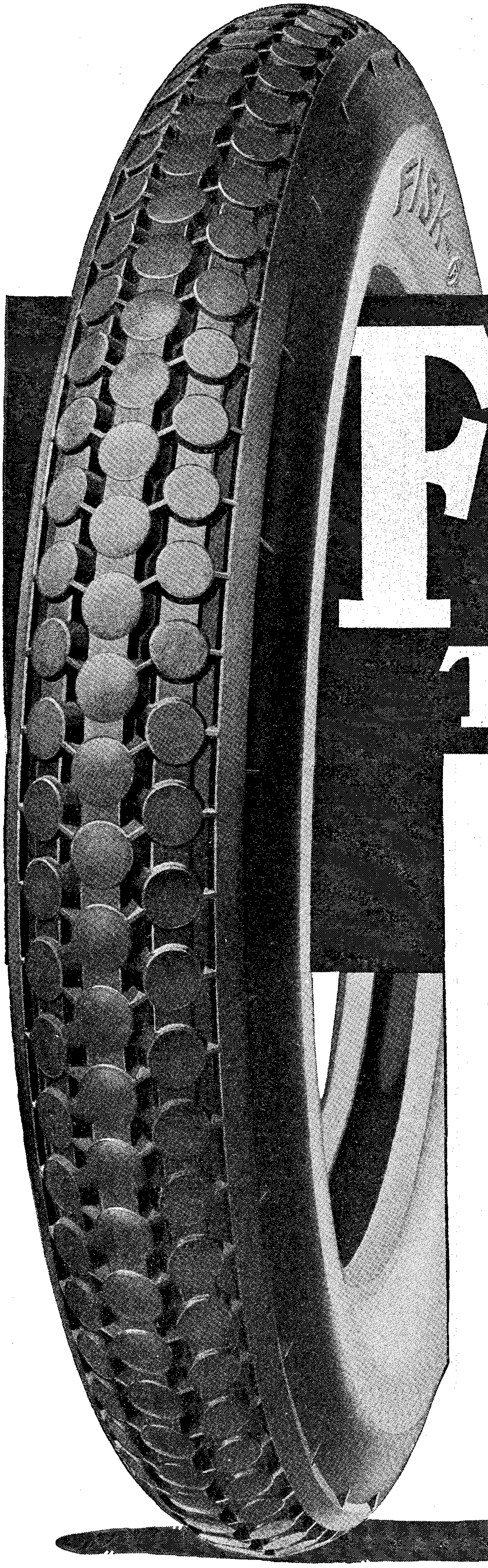
> White knows the ambitions and hopes of the small-town man, and he has also played with big things in politics and business. While he was in Congress he was nicknamed "Klondike Pete" by his intimate friends, not only because he had spent two and a half years in the Klondike during the gold-fever period, but because they realized that he appreciated how the Klondike gold-seeker felt in facing the hardships of that country and had a keen understanding of human nature.
>
> There is nothing of the snob about White, either as a seeker in the gold-fields or as a successful business man. He has learned to recognize the good in a man and soften his opinion about anything which might be characterized as "bad."
>
> White reflects his character in his appearance. He is of the rough-and-ready type. He does not resent criticism; in fact, he smiles at it and admits faults. He says he learned one lesson—that every one has faults—while he was knocking about the world, and therefore is ready always to forgive rather than condemn.
>
> Born in Elmira, N. Y., White spent his boyhood in Titusville, Pa., but has passed most of his mature life in Ohio. At Princeton he was a student in two of Woodrow Wilson's classes in his senior year.
>
> Stories have been sent out that White went to the Klondike to make $100,000 so that he could marry Miss Charlotte McKelvey, of Titusville, but these stories he says are untrue.
>
> "I picked up enough in the Klondike to buy a silk hat and a new suit of clothes to get married in," said White, "but the rest of the tale is a fake."
>
> At any rate, White went through the hardships of the Klondike trail and learned much of life's lessons. He says he got down to the bottom of human nature during those two and a half years and learned things which will never leave him during this life. He came back, married Miss McKelvey, a daughter of David McKelvey, of Titusville, and later moved to Marietta. Then he went into politics, a Democrat in a district overwhelmingly Republican.
>
> Some people take things pretty easy in Marietta, but not so White. When he went about campaigning he made friends everywhere. In 1904 the district woke up one morning to find that White had been elected as a Democrat to the legislature. It was a shock, but no one exprest regret.

The "wet" and "dry" issue played an important part in that campaign. The county leaders of the Republican party were "wet" and White was "dry." Moreover:

> White was against a combination of the brewery and the saloon, and some asserted that it spelled disaster. He sent out word that he would vote "dry" at every opportunity if elected. He kept that promise and became the "dry" leader in the lower house. The Anti-Saloon leaders adopted as their slogan, "Let George do it." He voted for local option and talked against the abuses of the liquor traffic, and he was permitted to serve two terms.
>
> Then he went to Congress. There, as Representative Cordell Hull, of Tennessee, himself a popular member of the House, says, everybody liked him for his courage and intelligence. In the House White became a close friend of Cox, also serving as a Congressman, and when Cox left the House to be Governor of Ohio, White succeeded him on the Ways and Means Committee. In Congress White voted twice for prohibition.
>
> White is practical in everything that he does, but that does not mean that he lacks ideals. He is practical because he understands, he says, that the world was not made for any one man, but for everybody who plays the game squarely and that the feelings of others should not be forgotten.
>
> This phase of his character fits him to a nicety with the Cox campaign. Governor Cox holds to pretty much the same viewpoint as White on such matters.
>
> White says he will take charge of the Cox campaign on the basis on which he has conducted all of his other important ventures in life. "Play the game for all it's worth; see the other fellow's side when you're sure he's not trying to put over something crooked, and never forget that the other man has feelings and ambitions of his own." He will play the game straight and in a big way, according to the view of his friends.
>
> He is forty-eight years old; a tall, rangy man, who talks straight from the shoulder. His face is deeply lined and gives the impression the minute one sees him that he has been buffeted by life and knows what it is to struggle for his place in the sun. Everybody in Ohio who knows him calls him George, or at least did before he was raised to the important post of National Chairman. His friends passed the remark that the Cox campaign would be run on a clean basis when they heard the news of his selection.
>
> White is particularly pleased by the number of telegrams of felicitation he received in the few hours after his selection from friends who really knew him. He said that he prized those much more than the mass of formal telegrams which he received from men and women who had heard of him but whom he had never met.
>
> White is a graduate of Princeton of the class of '95 and was popular among men there just as he has been popular among men in his later years. He is distinctly a man's man in every sense of the word.
>
> He has made most of his money—he is said to be worth a million to-day—in oil. His business is that of an oil-driller, and he has interests in Ohio, West Virginia, and Oklahoma. The accumulation of a fortune has not changed him a bit. He has made more friends, but he has kept the old ones too.
>
> White was a Wilson man in 1912, and he was for Cox this year the minute he heard that Cox was a candidate for the nomination. He believed firmly in Cox and thinks he will make a great President. On that basis, and that basis only, White says he is entering the fight as National Chairman to elect his friend.

The Sun and New York Herald is responsible for these additional side-lights on the character and ways of the Democratic campaign manager:

> On his way back from San Francisco, White went around by Seattle to look over the ground he had traveled twenty years before on the way to and from the Klondike. He didn't have a very good time. The city had changed considerably, and besides he lost his satchel. The porter got away with it in some manner at the station, and White had to content himself with buying a collar and shirt occasionally when the train stopt on the way back. He returned to Columbus to report to Governor Cox, considerably frayed and soiled, but grinning.
>
> "Bad luck," was all he said, "but it might have been worse."
>
> In politics as well as in business White is a firm believer in luck.
>
> "At San Francisco," says he, "we got the breaks. Hard work and breaks, and pledges in writing—that's what nominated Cox. I hope we'll get the breaks in November."



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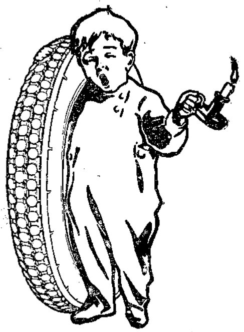

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MR. WILSON AMONG THE LIONS AT THE PARIS PEACE CONFERENCE

BREST was full of flower-bearing, flag-waving children, gathered to welcome the great American President, and on the way to Paris the Presidential train passed through a veritable lane of men, women, and children, all crying "*Vive l'Amérique! Vive le Président!*" But behind all this enthusiasm, says Mr. George Creel, who was there, cool and calculating intelligences, both in Europe and America, prepared to fight the idealism which inspired the cheers. The present Presidential campaign is among the large matters affected by the outcome of that historic contest between the American President and the European Premiers. Even before the Conference opened "there began the series of delays that were carefully and skilfully planned to give time for the subsidence of popular emotion." The heart of the Conference, that gathering of the "Big Four" around the library-table of the house that was allotted to President Wilson in Paris, is seen by Mr. Creel as a conflict where the American President represented most of the known virtues and the other three gentlemen typified several of the well-known vices, especially the one forbidden by the commandment beginning "Thou shalt not covet." Other commentators have agreed that Messrs. Lloyd George, Clemenceau, and Orlando were an unidealistic, even rapacious, lot, and two recent English critics at least have maintained that the three of them cajoled and hoodwinked the American President into making a peace that had little in common with his exprest ideals. It is on this last point that Mr. Creel defies the world. Wilson succeeded, he devotes many pages to proving, in forcing the European lions to forego their customary diet in favor of the milk of human kindness. It was no easy task, admits the President's latest defender. In Chapter Ten of "The War, the World, and Wilson" (Harper & Brothers), a chapter headed "Paris and Procrastination," Mr. Creel begins with the cleverly planned delays that followed the President's arrival. He writes:

> It was explained that Lloyd George was fighting for his political life in the English elections, that Orlando and the Italians were not ready, that France could not bear to let him commence serious conversations until he had received her full tribute—and seen the devastated area; and there were also the plans that had been arranged for his visits to England, Italy, and Belgium. The statesmen knew well that had the Conference convened upon the President's arrival it would have been suicide to resist a single Wilson proposition, for the peoples of the Allied countries were still in the grip of a great joy, a great gratitude, and a great faith. In equal degree these wise old men knew that it would be only a matter of weeks before these very people, going back to their ruined homes and desolate lives, would be thinking in terms of victory and indemnities.
>
> England cheered the President even more enthusiastically than Paris—the same England that had voted to repudiate his program just one week before—and even as the ovation rang loudest Clemenceau was informing the Chamber of Deputies that the old-fashioned system of alliances must be maintained. Fairly shouting his defiance to the League of Nations, he declared on December 31 that "there is an old system which appears condemned to-day, and to which I do not fear to say that I remain faithful at this moment. Countries have organized the defense of their frontiers with the necessary elements and the balance of power."
>
> The Italian situation also had its disquieting features. While in Paris on December 19 the King of Italy and his advisers had sounded out the President on the subject of annexing Fiume and a large section of the Dalmatian coast. This plan did not have the full-hearted support of either the King or Orlando, and as yet had not been mentioned to the Italian people, but was entirely the jingoistic conception of the reactionary Sonnino. The President did not attempt to conceal either his sense of shock or his unalterable opposition. He made it clear that he stood for every Italian claim that had been openly advanced, and would support the return to Italy of the Trentino, Trieste, and part of Istria, but that he saw nothing but injustice and new war in the original and startling proposition to seize the only possible seaport of the Jugo-Slavs. The Italians seemed to acquiesce, but the surrender was more apparent than real.

The President reached Paris from Italy on the morning of January 7, and was dismayed, says Mr. Creel, to learn that Lloyd George had not yet arrived, and that a visit to Belgium was in process of arrangement. "As firmly as might be," the President served notice that touring was at an end and that he must insist upon an instant convocation of the Peace Conference. The result was that—

> His very evident indignation forced an end to the deliberate dawdling, and on January 12 the first meeting of the Supreme Council was held. A primary task was the amendment of the armistice terms, and, this done, the President drove straight at the fundamental point, inviting a test of strength on the question of the League of Nations. He won. When the discussion ended announcement was made that the League of Nations would be "at the head of the order of the day at the first full meeting of the Peace Conference."
>
> On January 15, however, he suffered a reverse, the Council deciding against open sessions.
>
> Mr. Tardieu in the course of a recent article attempts to prove that Clemenceau was at all times an advocate of publicity. Nothing is further from the truth. The President and Lloyd George made the fight for the admission of the press, and were voted down by the union of France, Italy, and Japan. It was only under the pressure of an aroused public opinion that Clemenceau and his two supporters yielded to the extent of permitting the full sessions of the Conference to be open. Frankly the French Government's attitude toward publicity was a source of irritation throughout the entire Conference. Before leaving Washington the President had announced the suspension of American censorship of every kind, and had requested both France and England to pursue a similar course, stating his belief that the peoples of the world were entitled to the fullest possible information with respect to the Peace Treaty. Both governments agreed, but on arrival in Paris it was discovered that the British were living up to their pledge only in part, while the French were disregarding it entirely. The President's protests were specific and repeated, but only England heeded them.

The cleverness of the French, says Mr. Creel, was never more apparent than in their concealment of responsibility for the unfortunate condition, for it was even the case that they persuaded many to believe that President Wilson himself was the source of repression. So intelligent an observer as Dr. E. J. Dillon was deceived, and has written as follows in his "Inside Story of the Peace Conference":

> "It was characterstic of the system that two American citizens were employed to read the cablegrams arriving from the United States to French newspapers. The object was the suppression of such messages as tended to throw doubt on the useful belief that the people of the great American Republic were solid behind their President, ready to approve his decisions and acts, and that his cherished Covenant, sure of ratification, would serve as a safe guaranty to all the states which the application of his various principles might leave strategically exposed. In this way many interesting items of intelligence from the United States were kept out of the newspapers, while others were mutilated and almost all were delayed. Protests were unavailing. Nor was it until several months were gone by that the French public became aware of the existence of a strong current of American opinion which favored a critical attitude toward Mr. Wilson's policy and justified misgivings as to the finality of his decisions. It was a sorry expedient and an unsuccessful one."

Nothing could be further from the facts, declares Mr. Creel:

> There was no such censorship, and never at any time were "two American citizens" employed for any such purpose. The proof of it may be found in the Paris press of December and January. Every paper, on its front page, carried daily dispatches from Washington informing the French people that Wilson was not the spokesman of the United States, but only a repudiated politician. On December 18 Senator Knox made a bitter attack upon the League of Nations, declaring that the whole question should wait "until the Allies had imposed their terms," and on December 20 Senator Lodge delivered a lengthy address along the same lines. Both of these speeches were "played up" in the French and English press, and other regular features were the assaults of Roosevelt. Also on December 21 Senator Lodge made a speech in favor of Clemenceau's appeal for "secret sessions," and this was reprinted with keen delight. As early as January 1 such papers as *L'Echo de Paris* and the London *Morning Post* were carrying editorials stating that the attitude of the Republican Senate majority "placed full power in the hands of the Allies," but that this power must be used wisely, as any open humiliation of Mr. Wilson might be resented.

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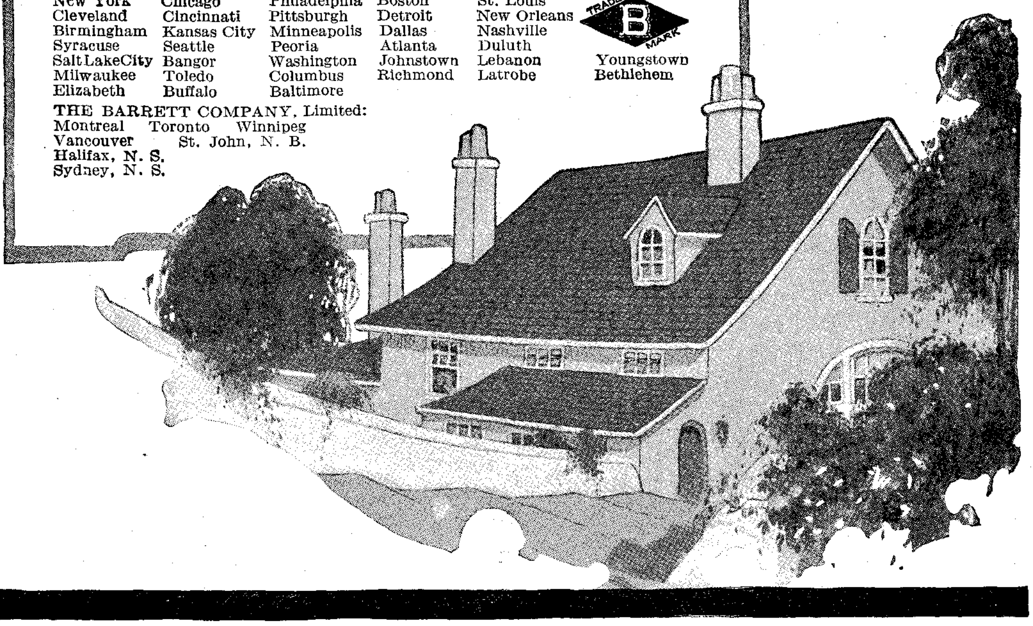

Mr. Ray Stannard Baker, attached to the American Peace Commission at the time, has given proof of the extent to which the campaign was organized and directed:

"A secret document showing how the French press—a large part of which is notoriously controlled by the Government—were being marshaled against the influence of the President and in support of French interests actually came into the possession of one of the American commissioners. It was in the form of official suggestions of policy of French newspaper editors, and it contained three items:

"First, they were advised to emphasize the opposition to Mr. Wilson in America, by giving all the news possible regarding the speeches of Republican senators and other American critics.

"Secondly, to emphasize the disorder and anarchy in Russia, thereby stimulating the movement toward Allied military intervention.

"Thirdly, to publish articles showing the ability of Germany to pay a large indemnity."

No council chamber, comments Mr. Creel in general agreement with most other critics of the Conference, ever witnessed the meeting of four more widely dissimilar personalities than those that faced in Paris "for the purpose of restoring peace and order to a distracted, war-torn world." He specifies:

In character, temperament, training, culture, ideas, and ideals the President, Clemenceau, Lloyd George, and Sonnino stood out as studies in contrast, and these differences were rendered more acute by a conflict in aims that was as instant as it was fundamental. England, France, and Italy were gathered as victors to impose terms upon a defeated enemy, their whole intent embittered by the wretchedness and desolation at their backs. The settlement with Germany accomplished, and accomplished according to the Mosaic formula, they were willing to talk of world peace and international concert, but not until then. Only the mind of the President was unclouded by any passion of anger or self-interest.

The Allied point of view found a vigorous and complete expression in Clemenceau, better known as "The Tiger." Mr. Keynes, in "The Economic Consequences of the Peace," more concerned with striking phrase than true characterization, may call Clemenceau "dry in soul and empty of hope," but no one else gained any such impression. The whole soul of the man flamed with a passion for France, his hopes for France were insistent demands, and to the support of an aggressive nationalism he brought the strength of a bull and the direct charge of a rhinoceros. As a youth he had writhed under the Prussian entry into Paris; from 1871 to 1914 he had seen his country exist as a nation by the sufferance of Berlin, and it was the memory of these unhappy, humiliating years that dominated him at every stage of the Conference. Reparation was not a determining consideration with him by any means. What he wanted, what France demanded, was security. Better a prostrate Germany too weak to pay than a Germany strong enough to pay, and therefore strong enough to repeat the assaults of 1870 and 1914. It was this fear, burned into French consciousness by a half-century of dread, that Clemenceau felt and exprest. When he presented claims that violated the principles of settlement it was in no spirit of mean rapacity, but in obedience to a very natural instinct of self-preservation. France was sick of living under the Prussian sword. The simplicity of Clemenceau's problem added immeasurably to the innate strength of the man. He stood for France, for France alone, and the devastated area was a background that not only robbed the stand of sordidness, but gave it a certain heroic quality. Squat and powerful, his long arms reaching well below his knees, his old face gnarled into the shape of a bludgeon, he was an embodiment of the primitive, the savage, as he stood over the bleeding, prostrate form of France and bellowed his challenges.

The President, on the other hand, was cast in no such picturesque rôle. He fought for principles, always less dramatic than the personal, and neither could he point behind him to a war-ravaged land. He had to find his foothold among seeming abstractions, while Clemenceau was privileged to fix his feet on the solid granite of an uncompromising demand. Clemenceau could talk concretely while the President was forced to talk generally. He could appear the man of action, while the President, in the nature of things, had to look the man of words. As for the other delegates:

Orlando, the Italian delegate, was a plump, cheery little man, blest with some approach to democratic vision as well as a very real ability, but at his back, controlling and directing, was always Baron Sidney Sonnino, the Minister of Foreign Affairs. Son of an Italian Jew and an English mother, Sonnino had the age and cynicism of Clemenceau without a single one of the Frenchman's generous passions. Hair white as snow, his age-stooped shoulders and hawk face joined to give him the appearance of a bird of prey. An imperialist in every inch of his old body, believing implicitly in secret diplomacy and the balance of power, Sonnino foresaw the triumphs of the Allies at the time Italy entered the war, and dreamed a dream of divided spoils that would restore the ancient glories of his country. The claim to Fiume, cutting off the Slavic hinterland from any Adriatic port, was his conception entirely, and at every point in the Conference he stood like iron against "Utopian theories" and "emotional experiments."

Working by himself, Orlando would have been of inestimable value to his country, but Sonnino was a millstone that dragged him down. Taciturn to the point of sullenness, offensive to the point of insolence, and holding himself aloof at all times, Sonnino was the most disliked man in Paris. His constant pull and haul with Orlando also had the effect of giving a weird effect of contrariety to every Italian position. What was said or done one day would be unsaid and undone the next, and as a result even the best friends of Italy were always in doubt as to how she wished to be served.

As for Lloyd George, there is no parallel for him in American politics, or in world politics, for that matter. So completely does the quicksilver quality of the man defy terse characterization that it is, perhaps, the safest course to let his political record define him. It was by reason of his savage assault upon England's established order and the English ruling class that Lloyd George first rose to power. The House of Lords was anathema to him, and not even William D. Haywood ever inveighed so eloquently against the tyrannies and oppressions of Special Privilege and Vested Interest. I was in England in 1910 at the time when he was driving through the Parliament act that stript the Lords of their veto power, and every true Briton able to support a white collar and a top-hat cried out against the Welshman as an assassin who meant to "murder them in their beds," a form of death that, for some reason, seems to hold a peculiar horror for Englishmen.

By his passionate championship of labor and his strenuous advocacy of home rule for Ireland he was the idol of these groups, and Asquith, forced to recognize his power in the Liberal party, had to make a place for him in the Cabinet. Growing in radicalism, in order to effect a distinction between himself and Mr. Asquith's more conservative leadership, there is no doubt that Lloyd George was reaching out for the reins of power, but the sudden explosion of war compelled a change in his plans. His patriotism may not be questioned, but even the most ardent patriotism can be made to take on the color of one's desires. Out of his alliance with Northcliffe came the bitter, unceasing attack upon Asquith that eventually enabled Lloyd George to aid in the overthrow of his party leader with every appearance of sincere purpose. He failed, however, to carry the bulk of the Liberal party with him in his desertion, and this compelled an alliance with his ancient enemies, the Tories. No matter what the country, reactionaries are ever hard bargainers and skilful traders, and while Lloyd George rose to be Premier, the price that he paid was the recantation of many of his labor principles, complete abandonment of home rule, and the placing of such Tories as Bonar Law, Carson, Milner, Curzon, and Balfour at his right hand in seats of power.

From that day to this his career has been marked by one patent opportunism after the other. Even while basing his December campaign upon assertions that Germany would be squeezed to the last pfennig and that the Kaiser would be tried and hanged in the Tower of London, he was solemnly assuring the liberal thought of England that he would stand for the League of Nations and a "peace of justice." In Paris he fairly bubbled with enthusiasm over the "rights of small peoples" and at the same time ordered fresh troops to Ireland, Egypt, and India to crush the rebellions of unhappy peoples. One moment with Clemenceau and Sonnino, the next a fine supporter of the President, he swung like a pendulum between the compulsions of his own decent principles and the necessity of placating his Tory masters. To quote the words of Dr. Dillon, an Englishman and a former admirer of the Premier, "his conduct appeared to careful observers to be traced mainly by outside influences, and as these were various and changing, the result was a zigzag. One day he would lay down a certain proposition as a dogma not to be modified, and before the week was out he would advance the contrary proposition and maintain that with equal warmth and doubtless with equal conviction. Guided by no sound knowledge and devoid of the ballast of principle, he was tossed and driven hither and thither like a wreck on the ocean."

A curious compound of drama, oratory, craft, cynicism, vision, demagogism, and idealism, the perfection of the blend made Lloyd George at once a hope and a despair. Only the brilliant audacity of the man, his humor, bubbling gaiety, and charm,

The Bath Made Easier

The Humphrey Automatic Gas Water Heater makes the bath easy for the kiddies—for mother—for *every member of the household* because it supplies an endless stream of piping-hot water at the turn of a faucet—without preparation or thought.

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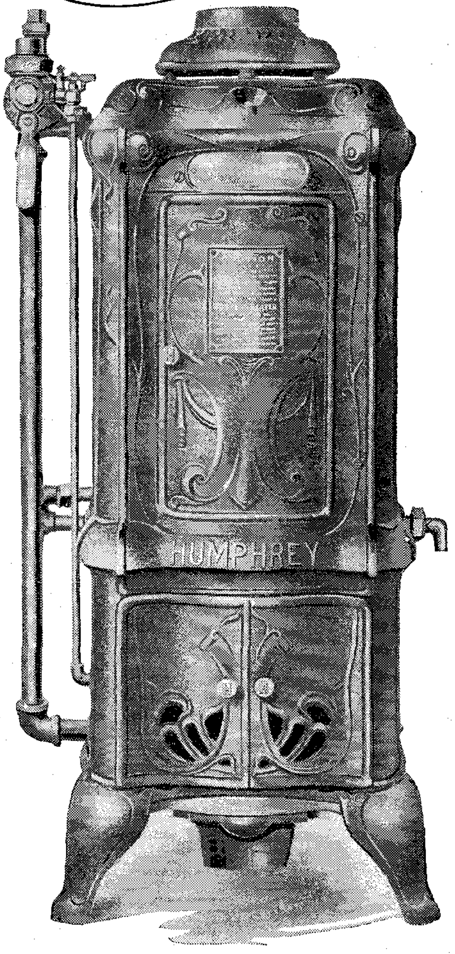

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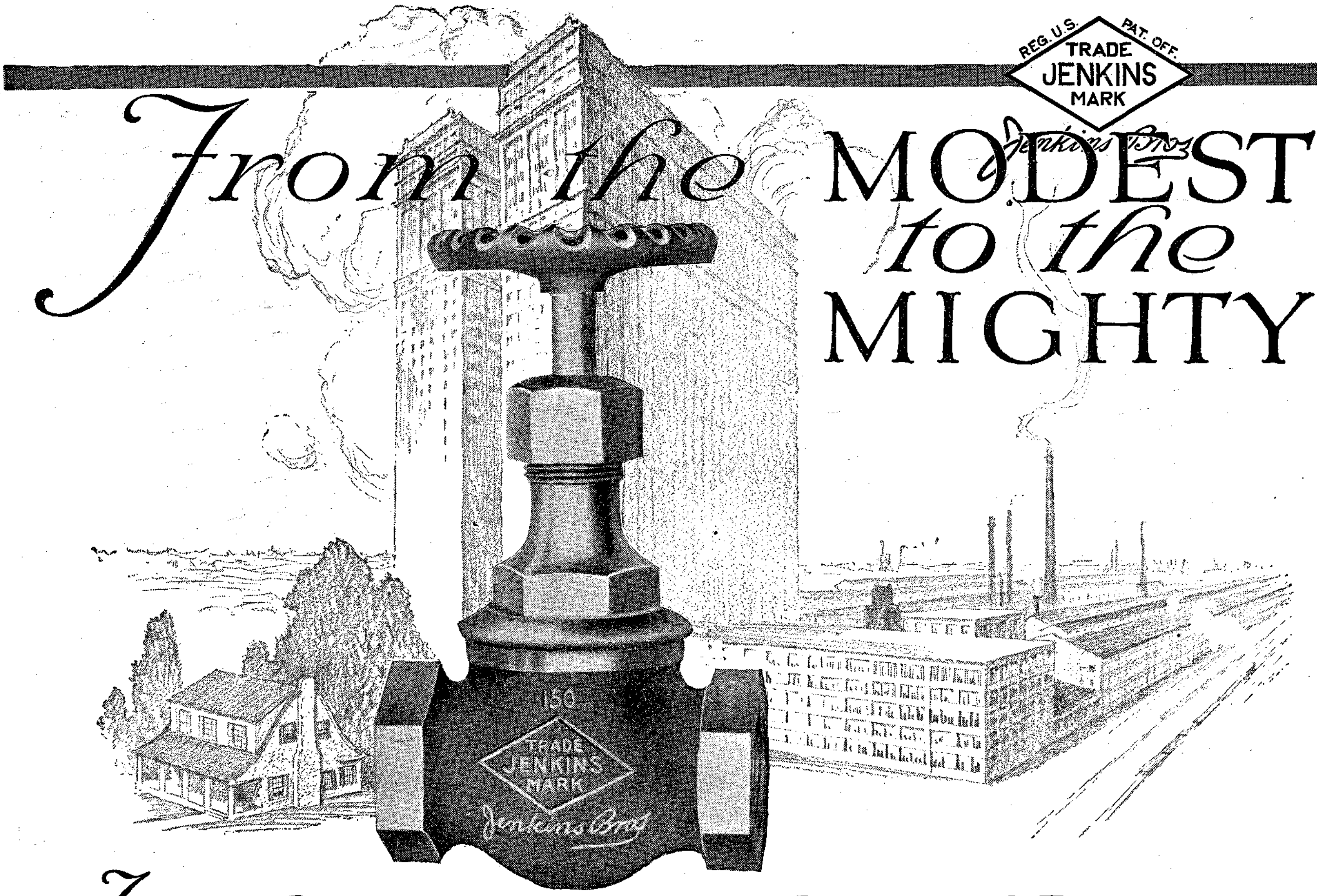

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Now, as for more than fifty-five years, Jenkins Valves are specified as valve equipment for GOOD plumbing. They are installed because they are not ordinary valves.

The design of a Jenkins Valve results from a thorough understanding of valves and valve requirements. They are heavier than other valves because more metal is put into them.

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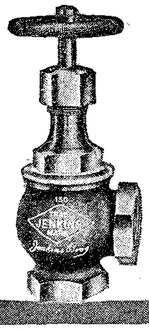
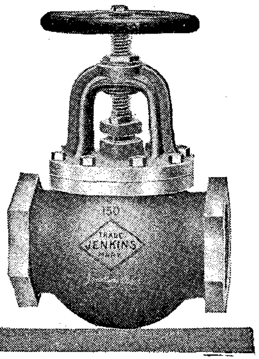
The Equitable Building is typical of the mighty structures using Jenkins Plumbing Valves throughout. Residences and factories in great numbers everywhere are Jenkins equipped.

Jenkins Valves are made of brass, iron, and steel in types and sizes to meet all requirements of power plant, plumbing, and heating service. They are known by the name and Jenkins "Diamond Mark" cast on the body.

We shall gladly send to home owners and home builders our booklet on Plumbing Valves; it shows in diagram the proper location of valves for plumbing satisfaction. Engineers, Architects, Plumbing and Heating Contractors and others interested in valves are invited to write for descriptive literature on Jenkins Valves for the service in which they are interested.





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enabled him to carry off situations that would have shamed another.

At no time was the President deceived as to the character or intent of his colleagues. One of his most valuable possessions is an uncanny gift of appraisement, and from the first he assessed each man fairly and accurately. The impassioned nationalism of Clemenceau, the medievalism of Sonnino, and the "grasshopper mind" of Lloyd George were simple of understanding after the first few meetings, and with every personal obstacle clear in his mind, he set to work on the accomplishment of the purposes that had brought him to Paris. Mr. Keynes, with glib authoritativeness, may declare "that the President had thought out nothing; when it came to practise, his thoughts were nebulous and incomplete," but the facts dispute this impudent assertion at every turn. What the President carried to the Peace Conference was a definite, concrete plan for a League of Nations, not as an afterthought, but as an integral part of the Treaty, its very foundation, in fact, for he saw plainly that the one hope of a just peace, a world peace, was in the quick creation of an independent, impartial machinery of adjustment and adjudication.

In driving to his goal, however, he was arbitrarily limited both by internal and external restraints. Every warm impulse of his nature stirred to the pathos of the desolated homesteads of France, Belgium, Serbia, and Italy, and even while he opposed many of the demands of their spokesmen as calculated to continue the very evils that had worked the wretchedness, his sympathy was at all times with them. Comradeship is an instinct with him, and he could not have forgotten, had he wished to do so, that America had fought side by side with these peoples. This very real understanding of their wrongs, this sense of blood brotherhood, made him patient of chicane, unfalteringly tolerant of deceit and selfishness, and robbed him of weapons that it would otherwise have been in his power to use.

There is also this to bear in mind. When the President, in behalf of America, served notice upon the world that the Conference must present a "peace of justice," he did not mean a "peace of parole" by any means. Much of the misunderstanding that muddles public thought to-day is due to this confusion of justice with such words as mercy, leniency, escape, condonement, etc. The President suffered from no such confusion. What Germany had attempted was an intolerable thing, and it was right that she should be made to pay for the attempt. The wrong that Germany had sought to do the world and to civilization was the greatest wrong in all history, and there must be no weak purpose with regard to punishment. There was to be no thought of crushing the German people, but what had to be burned into the consciousness of the German people was a due sense of responsibility for the horrors wrought by their mad ruler. Thus the President spoke and thus he thought.

Another difficulty in the path of the President was the American situation. Each day saw the French and English press filled with quotations from the speeches of Republican senators and Republican politicians in which both the President and his policies were repudiated and a "peace of victory" urged. Particular emphasis was placed upon Mr. Hays's declaration that "America will uphold her allies in whatever reparation they may exact for the frightful outrages inflicted upon them by the accursed Huns."

That no sympathy went out to the President is either a compliment to the strength of the man or else a bitter commentary upon the fair play of America, for his position was pitiable and desperate. Instead of support from the people whose declared ideals he championed, there came only the steady shrilling of the Senate, vile in its abuse, treacherous in its desertion of war-aims, enthusiastic in its encouragement of every attack upon the President and his principles. Facing him were men who jeered him in their souls and whose minds were set on his defeat.

For him to have returned to the United States, as a protest, would have been not merely desertion, but actual betrayal. Left to themselves, with every restraint removed, the Allies would have harked back to the Congress of Vienna for their inspiration, giving themselves entirely over to their fears, hates, and rapacities, and deciding upon a peace treaty at the last that would have doomed the world to resume life under the old menaces of catastrophe. Instead of a League of Nations, with its great world-court for the peaceful settlement of international disputes, only a return to the evil balance of power; instead of universal disarmament, freeing the back of humanity from a crushing burden, more millions into navies and even larger standing armies; instead of permanent peace, only the certainty of new and more terrible wars. There was but one decision possible to be made in honor, and that was to fight it out. This decision the President made, and he brought to its support a courage that never wavered, a faith that beat down opportunism, a resourcefulness that bewildered his opponents, and a character that compelled their reluctant respect.

RAILWAY-TRAINS THAT SPREAD BOLSHEVIK PROPAGANDA

PROPAGANDA is probably the most important factor in keeping up Bolshevism in Russia, according to the reports of recent travelers in that land. In railway-stations, in peasants' cottages, everywhere in villages and towns, even in remote sections, are posters and placards setting forth the advantages of the new régime and the iniquity of its opponents. Pictures are the most conspicuous feature of this form of educational work as carried on by the Soviets. Endless posters meet one's gaze—posters illustrating the treatment of the peasants by the Whites, posters showing Denikin with his foot on Russia's coal supply while factory chimneys are smokeless and engines idle, posters showing workmen fighting enormous capitalistic hydras, and also posters encouraging the planting of corn and improved methods of agriculture. Supplementing the pictures is explanatory reading-matter couched in the simplest language. An English correspondent, after observing this elaborate Soviet propaganda system, writes in the Manchester *Guardian* that good as was the English recruiting propaganda during the war, it was never developed to the point of excellence of that of the Bolsheviki. This correspondent further expresses his surprize at the efficiency with which the Bolsheviki have been able to distribute their propaganda material from Moscow. For this purpose he tells us they have made use of regular propaganda trains elaborately equipped with all sorts of paraphernalia for disseminating information regarding the doctrines of Bolshevism. For propaganda purposes Russia has been divided into five sections, each with its own train, prepared for the particular political needs of the section it serves. Each train is a propaganda unit bearing its own name and carrying its own regular crew, as corporate as the crew of a ship. The trains at present are named the "Lenine," the "Sverdlov," the "October Revolution," the "Red East," and the "Red Cossack." At the special request of Burov, the organizer of these trains, the correspondent inspected the "Lenine" and the "Red Cossack." He tells us that every car is decorated with paintings, always striking, but not always comprehensible. The pictorial work on the "Lenine" was more bewildering than that of the "Cossack" because it had been done while the "Department of Proletarian Culture" was dominated by the Futurists. "Its pictures were 'art for art's sake,'" we are told, "and can not have done more than astonish, and perhaps terrify, the peasants and the workmen of the country towns who had the luck to see them." We read further:

> The "Red Cossack" is quite different. As Burov put it with deep satisfaction, "At first we were in the artists' hands, but now the artists are in our hands," a sentence suggesting the most horrible possibilities of official art under Socialism, altho, of course, bad art flourishes pretty well even under other systems.
>
> I inquired exactly how Burov and his friends kept the artists in the right way, and received the fullest explanation. The political section of the organization works out the main idea and aim for each picture, which covers the whole side of a car. This idea is then submitted to a "collective" of artists, who are jointly responsible for its realization in paint. The artists compete with one another for a prize which is awarded for the best design, the judges being the artists themselves. It is the art of the poster, art with a purpose of the most definite kind. The result is something amusing, interesting, startling, which, whatever else it does, hammers home a plain idea.
>
> Thus the picture on the side of one car is divided into two sections. On the left is a representation of the peasants and workmen of the Soviet Republic. Under it are the words, "Let us not bind ourselves again . . . " and then in gigantic lettering under the right-hand section of the picture, "In the Heaven of the Whites." This heaven is shown by an epauleted officer hitting a soldier in the face, as was done in the Czar's army and in at least one army of the counter-revolutionaries, and workmen tied to stakes, as was done by the Whites in certain towns in the South. Then another car illustrating the methods of Czardom, with a state vodka-shop selling its wares to wretched folk who, when drunk on the state vodka, are flogged by the state police. Then there is a car showing the different Cossacks,

of the Don, Terek, Kuban, Ural, riding in pairs. The Cossack infantry is represented on the other side of this car.

On another car is a very jolly picture, of Stenka Razin in his boat, with little old-fashioned brass cannon, rowing up the river. Underneath are written the words: "I attack only the rich; with the poor I divide everything." On one side are the poor folk running from their huts to join him; on the other, the rich folk firing at him from their castle.

One car is treated purely decoratively with a broad, effective, characteristically South-Russian design, framing a huge inscription to the effect that the Cossacks need not fear that the Soviet Republic will interfere with their religion, since under its régime every man is to be free to believe exactly what he likes. Then there is a car showing Kolchak sitting inside a fence in Siberia with a "Red" soldier on guard, Judenitch sitting in a little circle with a sign-post to show it is Esthonia, and Denikin running at full speed to the asylum, indicated by another sign-post on which is the crescent of the Turkish Empire. Another lively picture shows the young Cossack girls learning to read, with a most realistic old Cossack woman telling them they had better not. But there is no point in describing every car. There are sixteen cars in the "Red Cossack," and every one is painted all over on both sides.

The correspondent received the impression from his inspection of the internal arrangements of these trains that the Russians are capable of organization if they set their minds to it. He describes what he saw:

We went through it, car by car. One car contains a wireless-telegraphy station capable of receiving news from such distant stations as those of Carnarvon or Lyons. Another is fitted up as a newspaper office, with a mechanical press capable of printing an edition of 15,000 daily, so that the district served by the train, however out of the way, gets its news simultaneously with Moscow, many days sometimes before the belated *Izvestia* or *Pravda* finds its way there. And with its latest news it gets its latest propaganda, and in order to get the one it can not help getting the other.

Next door to that there is a cinematograph-car, with benches to seat one hundred and fifty persons. But indoor performances are only given for children, who must come during the daytime, or in summer when the evenings are too light to permit an open-air performance. In the ordinary way, at night, a great screen is fixt up in the open at the side of the track. There is a special opening in the side of the car, and through this the cinematograph throws its picture on the great screen outside, so that several thousands can see it at once.

Another car is fitted up as an electric-power station, lighting the train, working the cinematograph and the printing-machine, etc. Then there are a clean little kitchen and dining-room, where, before being cinematographed, we had soup, a plate of meat and cabbage, and tea. Then there is a car book-shop, where, while customers buy books, a gramophone sings the revolutionary songs of Demian Biedny or speaks with the eloquence of Trotzky or the logic of Lenine. Other cars are the living-rooms of the personnel, divided up according to their duties, political, military, instructional, and so forth. For the train has not merely an agitational purpose. It carries with it a staff to give advice to local authorities, to explain what has not been understood, and so in every way to bring the ideas of the center quickly to the backwoods of the republic. It works also in the opposite direction, helping to make the voice of the backwoods heard at Moscow. This is illustrated by a painted pillar-box on one of the cars, with a slot for letters, labeled "For complaints of every kind." Anybody anywhere who has a grievance, thinks he is being unfairly treated, or has a suggestion to make can speak with the center in this way.

When the train is on a voyage, telegrams announce its arrival beforehand, so that the local Soviets can make full use of its advantages, arranging meetings, cinematograph shows, lectures. It arrives, this amazing picture-train, and proceeds to publish and distribute its newspaper, sell its books (the book-shop, they tell me, is literally stormed at every stopping-place), send books and posters for forty versts on either side of the line with the motor-cars which it carries with it, and enliven the population with its cinematograph.

The correspondent expresses the opinion that this propaganda system is probably the most effective instrument for the purpose ever devised. He suggests that it will prove an important factor in the development of the nation if the time ever comes that the new form of government is so firmly established that it can cease its military operations and devote itself to the problem of industrial rebirth. He says:

So far, the main use of these trains, as of the posters which they distribute, has been propaganda for the Soviets against Russian Whites and their foreign supporters. But, now that the civil war is ending, two of the trains are already being repainted with a new purpose. Altho the Polish invasion may once more postpone general concentration on economic problems, may mean that for yet another year all the best in the ruined country must be spent on war, it is hoped that in the near future all five trains will be explaining not the need to fight but the need to work in order to pull Russia out of the economic crisis which she was already facing in 1915, from which time until to-day she has never had the peace which is a first condition of its alleviation.

SEVEN MEN WHO DRAW FUNNY PICTURES—AND LARGE SALARIES

DRAWING A FINE PICTURE of Niagara Falls on the starched front of his father's dress shirt and standing up that night to eat his supper marked the first venture into art of Bud Fisher, creator of Mutt and Jeff. Now Mr. Fisher's drawings earn him a quarter of a million a year, he lives in a ten-room apartment on Riverside Drive, New York City, and we are told he is the possessor of a pearl-inlaid ukulele and a German police dog, to say nothing of a yacht and a fine country estate in England. Bud Fisher is one of seven nationally famous comic artists, not one of whom earns less than $25,000 a year, and at least three of whom receive salaries exceeding that of the President of the United States. The others are Rube Goldberg, of "Boob McNutt" fame; Clare Briggs, originator of "Skinnay"; Gene Byrnes, who portrays the antics of "Reglar Fellars"; T. A. (Tad) Dorgan, responsible for "Silk Hat Harry"; Fontaine Fox, who runs the "Toonerville Trolley"; and George McManus, who lets the world in on "Bringing Up Father." To Jane Dixon, representing *People's Favorite Magazine* (New York), these gentlemen recently related the circumstances of their entering the cartoonists' profession and how they happened to develop the comic features which have made them famous. Of Mr. Fisher we learn that he was connected with the San Francisco *Chronicle*, covering the races at $15 a week, when he drew the first of the "Mutt and Jeff" series. He says:

"One evening I came into the office late. My ponies had all run backward that day and I was feeling low. I sat down, drew a picture of my own idea of myself, labeled it 'A. Mutt,' and handed it to the night editor.

"'That's a funny-looking bird,' said the N. E. 'Who is he?'

"'That's me,' I answered, 'A. Mutt.'

"The next day they sent Mutt to cover the races."

The success of A. Mutt was instantaneous. He began picking winners. His luck was uncanny. It seemed he could not lose. The editor of *The Chronicle* once told me race fans used to line up outside the building every morning for a block or more waiting to grab the first papers off the press for Mutt's tips.

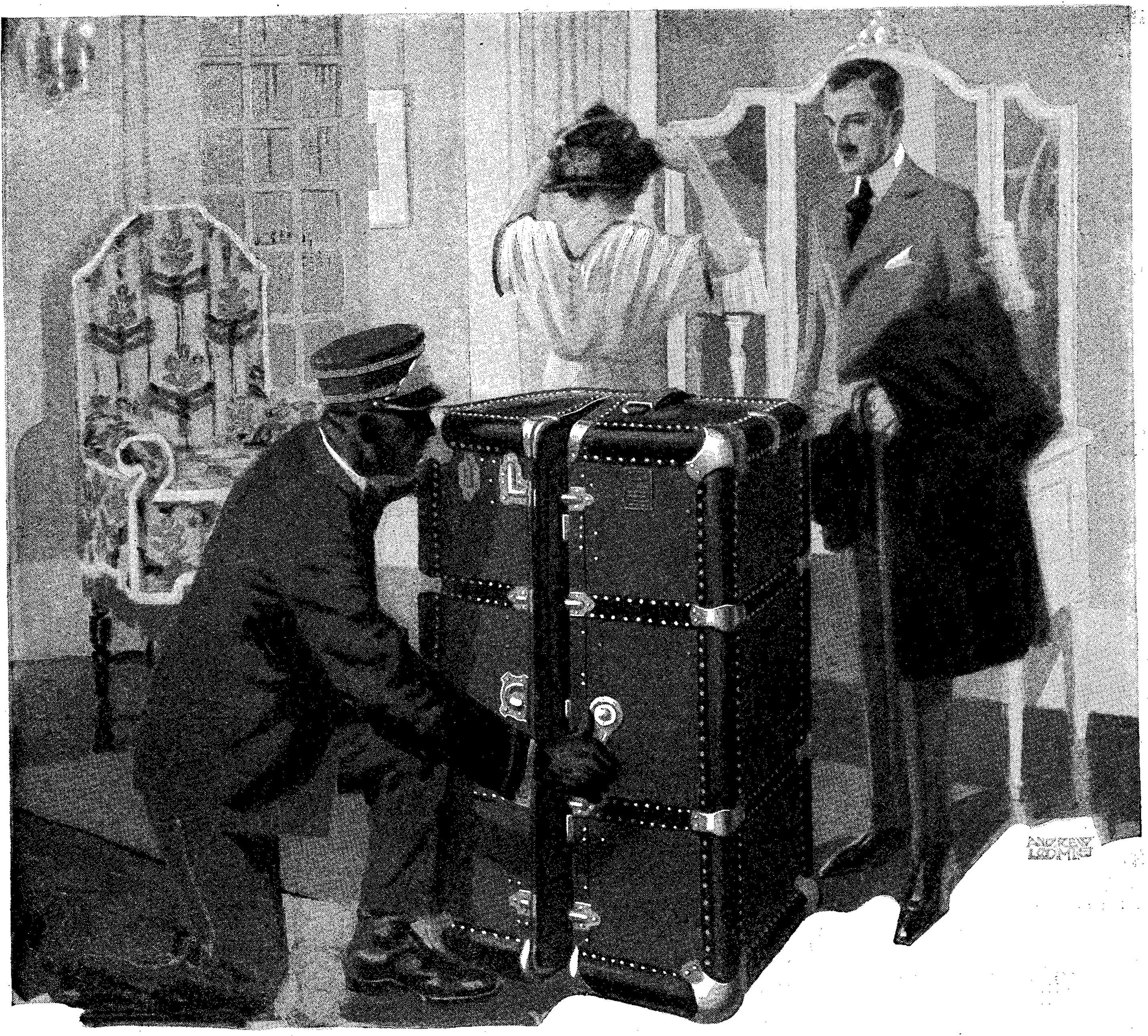
Came the Reuff scandals in San Francisco. *The Chronicle* was bitterly opposed to the policies of the Reuff mayoralty ring. Bud Fisher took Mutt to visit a local insane asylum. There Mutt found little Jeff, and adopted him because, as he explained, "Jeff was the only man in the world crazier than Abe Reuff." The little fellow proved such a hit he was kept in the picture.

By way of the San Francisco *Bulletin*, Bud Fisher came to New York, joined *The American*, moved on to *The World*. The trail leads upward in such leaps and bounds it has the effect of making the audience dizzy.

"Salesmanship?" says the leaper. "Sure. Make up your mind what you are worth and stick to it. Never ask more than you know you are worth. The other fellow may say you are crazy, but if you prove he is wrong he will not haggle with you the next time you come to sell your goods."

To-day Mutt and Jeff are cashing in to the tune of a quarter of a million dollars a year. They are harvesting laughs from their cartoons, moving pictures, "legitimate" shows, and books in cities and jerkwater junctions of every State in the Union, not to mention Great Britain, Japan, Mexico, Australia, Canada, Cuba, and France. Even New Zealand joins in the chorus.

Rube Goldberg told the interviewer that the first picture he drew that brought results was one of his teacher. He admitted it did not flatter the lady much, but said the results made



THERE is genuine satisfaction in knowing that, when one's trunk is opened after the journey, one's clothes will be found in perfect condition, ready for the appearance in the fashionable restaurant or ballroom.

Then, too, the Indestructo bespeaks genuineness, good taste, and a natural preference for the better things. Inside and outside, it is a trunk that truly represents well-bred people én tour.

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Insured INDESTRUCTO Trunks *Trunk Makers* Modern N.V.P. Trunks him sore for several days. Goldberg's father decided his son should be a mining engineer and to that end sent him to the University of California, where the young man drew some pictures for the college paper. Further:

> "When I was graduated I went out into the gold-fields of California to embark upon my career of mining engineer. I suffered through two miserable months, with the drawing urge growing stronger every hour. Finally I packed my kit, went back to San Francisco, and told father he'd have to dig up another mining engineer for the family tree. He was disappointed, but agreed to compromise on civil engineering. I was sent to the city hall, where I drew a hundred dollars a month and plans for sewerage systems. One day I dropt into the office of *The Chronicle*. The editor's son had been a college friend, and the governor was familiar with my work on *The Pelican*. He agreed to pay me eight dollars a week. I would gladly have worked for nothing.
>
> "The drop from twenty-five per to eight did not sit well with the home folks. Father gave me up as hopeless. Not until I came in, many months later, and announced I had been raised to thirty-five dollars a week did he concede he might have been wrong about the mining stuff.
>
> "From *The Chronicle* I went to *The Bulletin*, where the cartoonist was given a better show. Here I developed a New York bug. The editor offered me $50 a week to stay put, but it was the big town or nothing. Arrived in the city of my dreams, I peddled my drawings to every paper. I ended with *The Mail*, and there I landed. That was thirteen years ago. I've been on *The Mail* the entire stretch. To be successful, a fellow must keep his work moving along. The minute he stalls the engine popularity begins to slip through his fingers. And he must get better all the time. Just as good is not good enough. He must be out to beat his own record."

Clare Briggs went to school at the University of Nebraska, where General Pershing was his teacher in mathematics, a branch of learning in which the cartoonist admits he held the cup for remaining longer than anybody else at the foot of the class. On one occasion, when the teacher's patience was completely exhausted, he yelled: "Briggs, sit down. You don't know anything." After that, says Briggs, there was nothing left for him to do but become a cartoonist, and on the advice of a friend he went to St. Louis to look for a job—

> "After several discouraging weeks I tackled *The Globe-Democrat*. I asked for $15 a week, on the principle you can't shoot a man for asking. They gave me a ten-spot. You should have heard my six-dollar friend howl from his perch on *The Republic*.
>
> "Just as it seemed I was about to make my fortune on a twenty-five-dollar-a-week shift, and that I could go back home and claim the girl I was convinced every fellow with a grain of sense was trying to steal away from me, the half-tone picture came along and kicked the feet from under newspaper artists. It looked like the end of the world then, but it proved to be exactly the thing we needed. Now we were compelled to use our imaginations, our inventiveness.
>
> "At the close of the Spanish-American War I was fired. I had enough left over to make a smoking-car trip to New York. My total fortune on reaching the big town was $5. For the next two years I lived mostly on nothing a week, the exception being an occasional comic to *The World*. The minute I hit the twenty-five-dollar mark I made a flying leap out after the girl. Under her influence my star began to ascend. I received an offer from the Chicago *Herald* to draw sport cartoons. It was here I began my kid series, an idea inspired by the fact Chicago was thoroughly disgusted with the conduct of its baseball teams. I called my series 'The Days of Real Sports.' Skinnay and the pup brought me back to New York and to *The Tribune*. A great boy—Skinnay. He built me a fine home in the country, and the girl from home likes him."
>
> In the picturesque Briggs home, New Rochelle, are three of the younger generation—a daughter of nineteen, a son of fourteen, and a girl of two. It is on the strength of the baby that the artist and the girl from home are collaborating on a new series, "What a Baby Thinks About." Says father Briggs: "As it is the finest baby in the world, it ought to be a bang-up series."
>
> The Briggs house is built from the timbers of an old schooner reclaimed from a shipyard, because, as the owner explains it, he "hates anything new and shiny." It is situated on a rocky knoll, with a brook tumbling along at its base, and is the show place of a section where artistry and architecture go hand in hand.
>
> There Clare Briggs, who asserts there should be a law passed permitting a man to change his name at will, plays at being a boy again. He drops down to the city in his trusty Cadillac long enough to turn out "When a Feller Needs a Friend," or "Somebody's Always Taking the Joy Out of Life," or "Ain't It a Grand and Glorious Feeling?" While in the city he visits his banker to see if the last quarterly ten or twenty thousand came in on time.

"Dinty Moore," the perpetual source of trouble between "Maggie" and "Jiggs" in that edifying drama, "Bringing Up Father," was first seen by George McManus in a show in St. Louis, where the cartoonist's father was in the theatrical business. McManus says he liked Dinty the minute he saw him and has been using him in his cartoons ever since. Of Mr. McManus's career we read:

> "Nineteen seemed to me a fairly good age to start on the trail to fortune. I had saved a little money, and it bothered me. New York was the place to spread it. I hit the big town and found its possibilities as a playground had been greatly underestimated. Not until the bank-roll had melted did I bother about work. I was up against it, but too proud to wire home a distress signal. On the strength of some half-page series, the Sunday *World* gave me a six months' contract.
>
> "My first character of importance was a tramp I called Panhandle Pete. Then I struck my first real pay streak. I met the girl who has since become Mrs. McManus. She was the inspiration for the 'Newlyweds,' serving as the model for the principal character. She went over big. Then came 'Let George Do It,' for *The Evening World*. Finally I signed a long contract with *The Journal* and *American* and started 'Bringing Up Father.'"

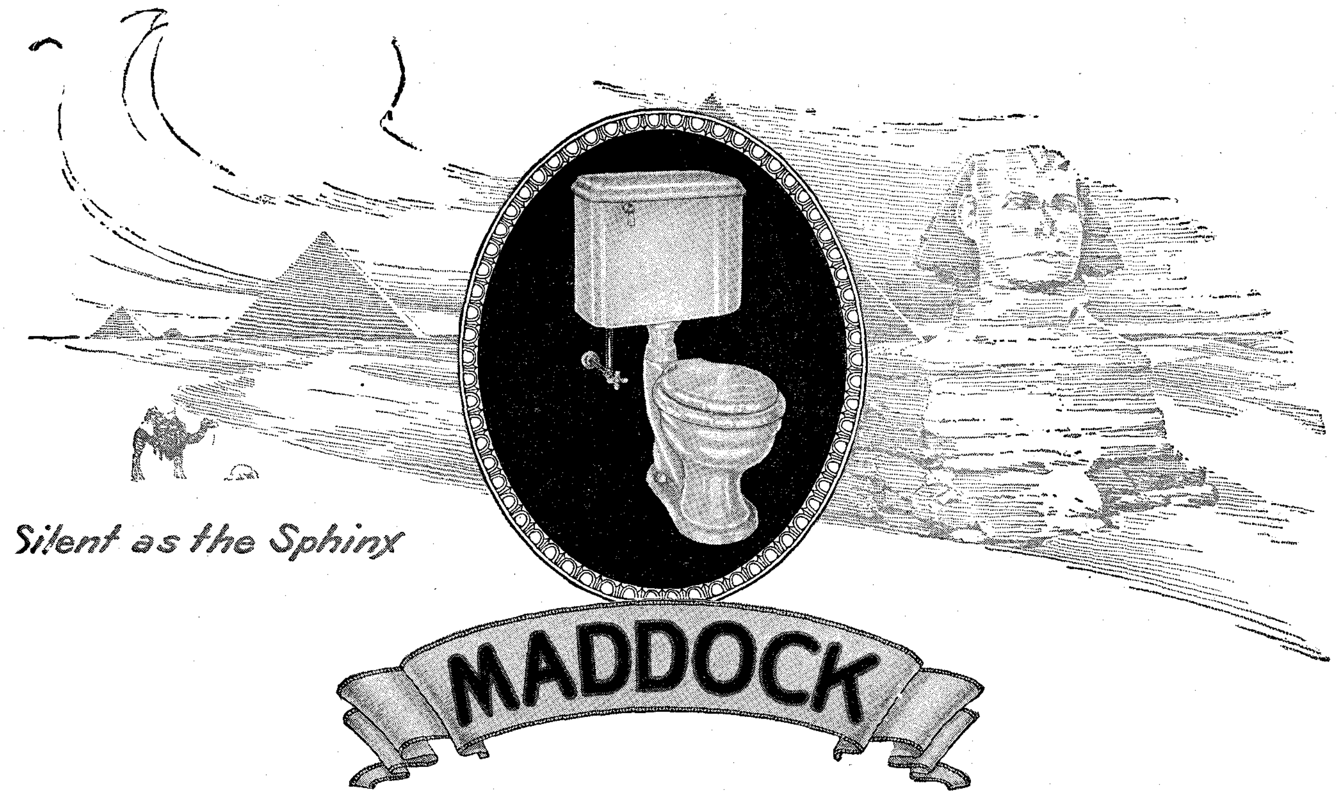
Thomas A. Dorgan, "Tad," was brought up in San Francisco. His first job was on *The Bulletin* in that city, where he started at $3 a week. He fell down on an assignment, was fired, and had to work six months for nothing before he got back to three per once more. To quote Mr. Dorgan himself:

> "Shortly after I hit the thirty-dollar mark—large money in those days—I had a letter from a man by the name of Brisbane. He said if I would come to New York he would pay me $75 a week. I showed the letter to the boss's secretary, a young lady wise in the business.
>
> "'Forget it,' she said. 'The boys are kidding you.'
>
> "I remember the gang held a heavy conference to decide whether the letter was a cheater or on the level. They came to the conclusion there wasn't that much money.
>
> "I wrote to this Mr. Brisbane to find out what made him think he was one of the Morgans. Back came a note repeating the offer. My getaway broke all speed records in a town where traveling was never anything but the fastest. In New York I went to the address given in the letter and met Mr. Arthur Brisbane, a power on *The American*. He offered to sign me for a year at the given figure. If he would only have made it a hundred years I would probably have choked to death in my haste to yell 'Let's go.'"

Fontaine Fox, who operates the "Toonerville Trolley," came from Louisville. His artistic bent manifested itself, when, at the early age of seven, he drew a train of four hundred freight-cars on the new parlor wall-paper. Apparently his ability was not appreciated at home, for he was sent to Indiana University to become a lawyer or doctor. After leaving school, however, he became connected with the Chicago *Post*. Further:

> He bethought him of the trick trolley-line which bounced him to and from work back in Louisville. Might be a good idea to try it out on the city folk. With the since-famous "Skipper" in charge, he sent the Toonerville trolley on its daily run through *The Post*. It carried the ambitious creator straight through to success. At the same time he found "Thomas Edison, Jr.," trying on a discarded derby hat retrieved from an ash-pile in a vacant lot near his home. The junior Edison's mother caught her dear hopeful just as he was emerging from the lot, the hat riding well down over his ears.
>
> "I followed the two of them to a barber-shop, where the boy received one close hair-cut by way of punishment," says Mr. Fox. "I went home and drew my first kid cartoon. I have always been glad I followed that indignation meeting to the barber's.
>
> "It took my father a long while to become reconciled to the absence of a handle at the end of my name. Even now he shakes his head and allows as how cartooning is a queer way to make a living."

Fate spoiled a perfectly good harness-maker when she made



First in America to make the silent action closet

The first silent-acting closet ever made in America was manufactured by Thomas Maddock's Sons Company twenty-three years ago.

The advent of the silent-action feature marked a most important epoch in the development of the water closet. It made closet operation inaudible beyond the bathroom walls, thus eliminating the objectionable noise that had always accompanied flushing in every type of closet. It represented the greatest single refinement in sanitary plumbing equipment for many years.

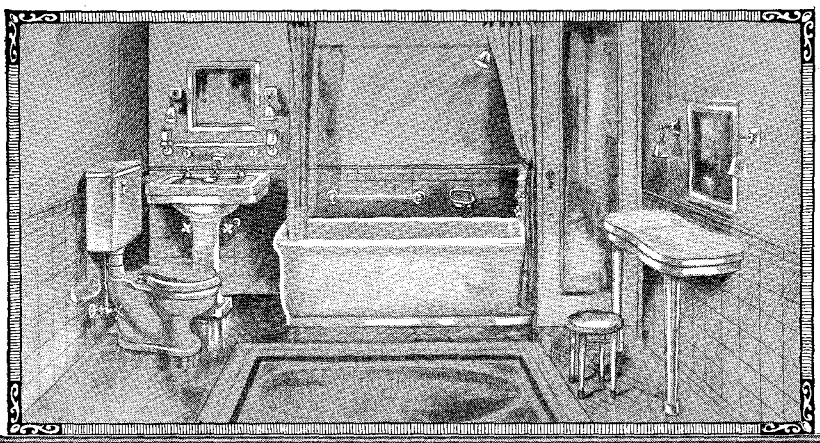
All Thomas Maddock sanitary fixtures are made entirely of glistening, snowy white, easily cleaned, practically unbreakable vitreous china—noted for its freedom from cracking, chipping and crazing and for its non-absorbent qualities. Hence, the present-day patterns of Maddock silent-acting closets are considered the most perfect type of noiseless closet construction yet achieved.

Anyone really interested in building a new home, or who may be considering changes in an old bathroom, should send for the book, "Bathroom Individuality," which will be mailed upon request.

Next to the doctor, the plumbing contractor is the most important man in each community in protecting the health of the family.

Thomas Maddock's Sons Company, Trenton, N. J.
OLDEST • SANITARY • POTTERS • IN • AMERICA —— ESTABLISHED 1859
Manufacturers of sanitary earthenware plumbing fixtures for bath, kitchen and laundry needs in the home; also sanitary ware for medical, industrial, commercial and public building installations
Branches: New York – Philadelphia – Chicago – San Francisco – St. Louis

THOS. MADDOCK'S SONS CO. TRENTON, N.J.



*The fixture shown in the panel above is the **Madera-Silent,** which is made throughout, excepting the white celluloid covered seat, of vitreous china.*
Massive in appearance, strong in construction, silent in operation and "all white" in color, this fixture combines advantages that will add character to any bathroom.

First in the industry — foremost since

Gene Byrnes a cartoonist, according to his own version of the case. He says:

> "I was booked to follow in my father's footsteps, but I lost the trail and started a shoe-repairing shop instead. I ran the first electric repair shop in Brooklyn—'Sole you while you wait.' My next job was selling a certain bug dispeller, for which I drew down the weighty recompense of $12 a week, with a promise of $15. One day I was sent to give a practical demonstration of my wares in a hotel. I couldn't stand the gaff, so I checked my stock and went to *The Evening Telegram.*
>
> "I had done considerable drawing for *The Brooklyn Times*, but had given it up as a wrong lead. It took all my time explaining my 'balloons' to an editor who had charge of the comics during my stretch. He was the sort of a cuckoo who went to the Winter Garden and thought Frank Tinney was a tragedian.
>
> "The *Telegram* editor agreed to give me a try-out. I turned in a one-panel comic, 'Reglar Fellars," After a while the editor informed me I would have to come across with something else; he was not running a seed catalog. The result was 'It's a Great Life If You Don't Weaken.' The success of this strip encouraged me to try 'Wide-Awake Willie' for *The Herald.* You should see them now translating Willie for the Hungarian trade. It hands me a jolt every time I look at Willie done up in bundles, ready for his overseas journey. A fellow never knows how far he can go until he starts traveling."

THE OBREGONISTAS BRING NEW LIFE, OF A SORT, TO MEXICO CITY

BULL-FIGHTS ARE AMONG THE THINGS that have come back to Mexico City since Obregon took hold of affairs down there. Carranza prohibited them, and during his reign the great *Plaza del Toros* was closed. Sometimes a tame little affair was pulled off outside the city, we are told, but it was comparatively bloodless, the killing of the bull being forbidden. But the Obregonistas, who are said to be a sturdy bunch, in for a good time, have opened the *Plaza* once more, and it is crowded with fans every Sunday. The revival of the bull-fight is only one of the changes brought about by the new régime. It seems that there has been something doing in the Mexican capital every minute of the time since Obregon and his mighty men invaded the place, and, in the words of Sophie Treadwell in the New York *Tribune*, the city now is "a far more interesting place in which to live" than it formerly was. The Obregon men are different from the Mexicans of the city, it is said. "They have come down from the North like another race—tall men, daring-looking and strong. There is a different look in their eye, a different spring to their step, and the sad old streets pulse with the life of them." The center of all activity is the magnetic Obregon himself. The leader holds forth in the small but interesting Hôtel St. Francis, and we read of him and his surroundings:

> In front a veritable little island of black Fords is banked up in the wide, white street. The sidewalk is impassable for the waiting crowds: soldiers of all kinds, *partideros* of long standing, comparatively, would-be *partideros* of no standing, ex-Carranzistas, ex-Pabloistas, ex-everything dead or sleeping; colonels, generals, *licenciados.* Resting against the walls are the Yaqui guards, their guns, their women. Hundreds of one-armed and one-legged men in rags, the *invalides* of the army, suing by their patient, daily presence for the payment of their paltry and long-suspended pensions; beggars, confidence men. But with the exception of those of the soldiers, who are always everywhere their men are, there are no women.
>
> Inside the doors, the same crowd, denser. The *patio* impenetrable. Somewhere in the center of the mass a brass band, blaring an alluring *danzon.* On the other side of the *patio* the stairs, in the shelter of which, on the stones, sleeping thick and stinking, the Yaqui guards off duty.
>
> Up-stairs, the hallway around the *patio* is still more crowded. Impossible to reach the two doors at the two front ends, toward which all are faced. Through either of these doors Obregon can be reached. The elect struggle their way through, and are admitted, after much conversation with the man who peeks out the barely opened door into an inside bedroom. There they sit on the bed or stand for a long while, while other importants go in and come out.
>
> All Mexicans admit, even those who hate him most, that Obregon is *simpático.* Americans find him the same. He is, as the genteel feminine phrase used to be, "a very magnetic man." He is robust, smiling, and the expression in his eyes is wonderfully attractive, it is so *viva*, so indulgent, and so "wise." If I had something very learned, very good and helpful, and very long to expound, I do not feel that I would go with it to General Obregon. I think he would be too good-naturedly a little suspicious, and I know he would find it tedious. But if I were in trouble I feel he would be interested without seeming to listen, and that he would very swiftly fix it all right.
>
> Obregon (his enemies say to play up to the momentary whim of the country for *civilismo*) dresses in civil. And he asks not to be addrest as "general." But as far as I have heard he is nevertheless always called "*mi general*" by all who surround him. Which can indicate that the *civilismo* talk is not a genuine expression of the feeling of the people (which it surely is not, tired of revolutions as they are), and that no Mexican can believe that any man is serious in not wanting to be called "general."
>
> But I think he is. Not from any antimilitarism, loudly as he may proclaim himself "Citizen Obregon," but from a sensitive vanity and a sense of humor. There are so many generals in Mexico!

Obregon has a tough job before him. His country has a big debt, but no money. There are a lot of little chiefs, each with a little army and a big ambition of his own. How to unite all these fellows is what's worrying Obregon. Perhaps he could get them to pull together if he could contrive a perpetual celebration in which they could all show off in a nice, colorful parade every day. In any event, they seem to get together reasonably well on such occasions, as was evidenced at the recent festivities in honor of the inauguration of President Adolfo de la Huerta. Says Miss Treadwell:

> The inaugural parade was stunning. These *jefes* from the *sierra*, drest magnificently in *charro*, riding such horses as we at home have forgotten ever existed, caparisoned in saddles, bridles, and blankets that the imagination of the most fervidly extravagant motion-picture director could never even dream of in his most inspired moment. . . . A black horse, shining and quivering like some untouched steed of the gods; a brown chief from the mountains, his body molded into soft yellow buckskin, a towering, huge hat to match, silver and black trimmings; a saddle of pure white leather, delicate as a lady's glove, inlaid with gold and silver and something gleaming like midnight blue; a brilliant red blanket.
>
> A row of four or five *jefes* like this, but each different, each distinct and individual, preceded by ten or twelve mounted trumpeters, rather shabby, but tooting magnificently, and followed by the rank and file of his particular private and personal *elementos*, several hundred or several thousand men—on horse or on foot. The Yaquis, with the red-cotton bands around their battered, Texan-looking hats, the red-cotton sash around the waist; the men from the South in soiled white cotton, wearing the big, wide hats of straw, their bare feet thonged into crude sandals; small, poverty-stricken-looking soldiers, weighted down with belts of cartridges of varying caliber—tough as the straggly broncos they mount.

DO PEOPLE EVER LIVE MORE THAN 106 YEARS?—Men reported to be well over the hundred mark are likely to receive more credence from the general public, it appears, than from scientists accustomed to base their deductions about human longevity on hard and cold facts. In two recent cases, one of a man reported to be 135 and another of a man reported to have died in his 117th year, investigations seem to have shown that the ages were exaggerated. In the last case, that of Mr. Thomas Morris, an investigation was made by Arthur Hunter, chief actuary of the New York Life Insurance Company. He writes:

> As I have seen so many unreliable statements regarding persons living to 115 and older, and as I have never known an authentic case, including Parr, of a person living beyond 106, I thought it worth while to trace the case of Thomas Morris through the Bureau of the Census. The Director of the Census informs me that Thomas Morris gave his date of birth in 1900 as 1825 and his age as 75; yet ten years later he gave his age as 116, or an increase of 41 years during the short space of ten calendar years! One is also puzzled by the fact that he claimed to be 116 in 1910, and yet in 1920 he claimed to be in his 117th year. It is highly probable that Thomas Morris gave his real

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Ru-ber-oid Roofing makes a strong appeal to the farm or ranch owner who buys his supplies according to a standard of quality rather than a standard of price. It gives unsurpassed service on farm buildings both large and small. For the roof of a barn, milk house, corn crib or silo, it has no superior.

The aim of The Standard Paint Company has always been, and will always be, to produce in Ru-ber-oid the best ready roofing that can be made. No cheapening of manufacturing cost at the expense of durability has ever been countenanced.

Since you can determine the quality of ready roofing, not by its looks in the roll, but only by its service on the roof, it pays to buy Ru-ber-oid. You know for what the name stands.

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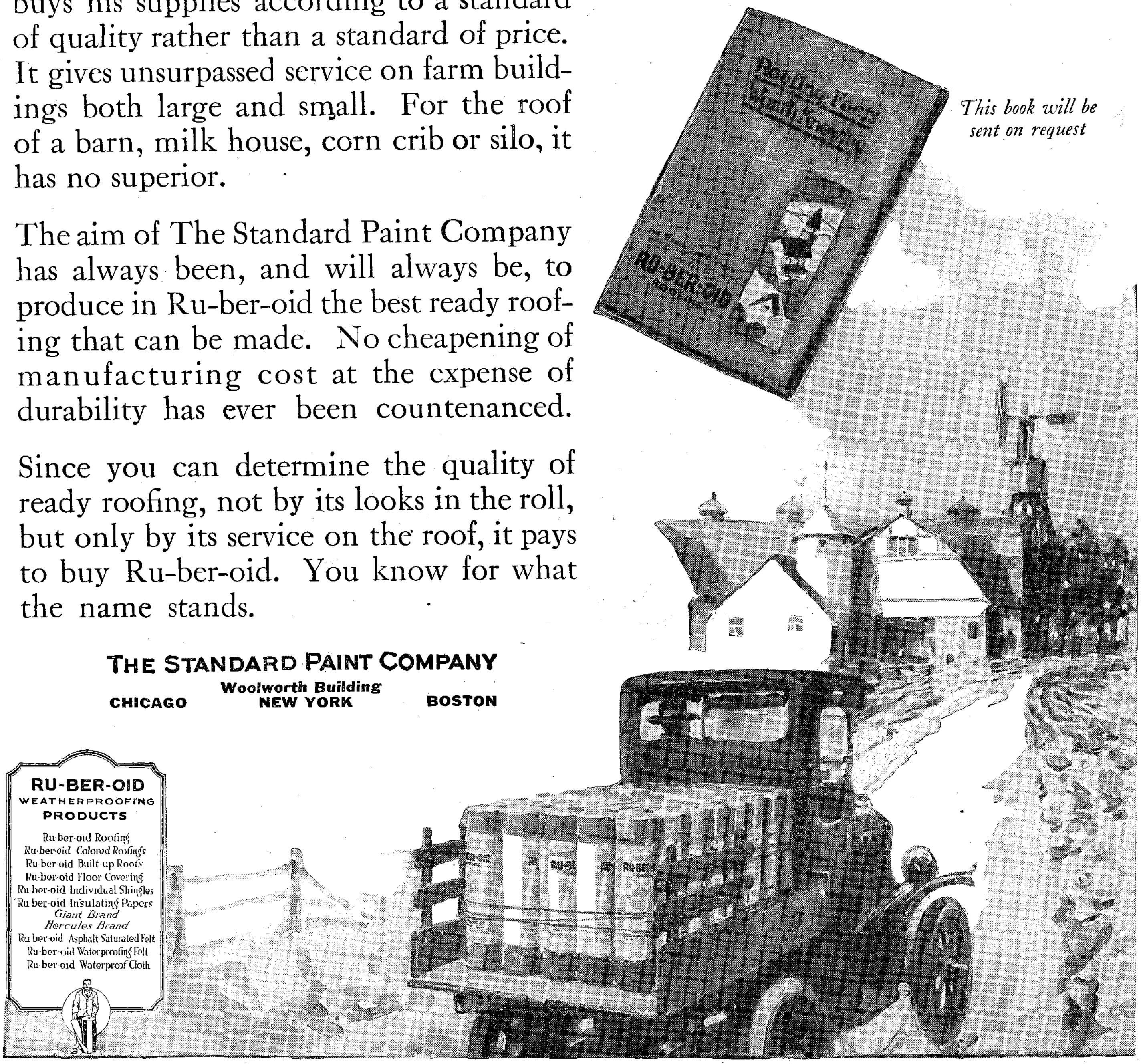

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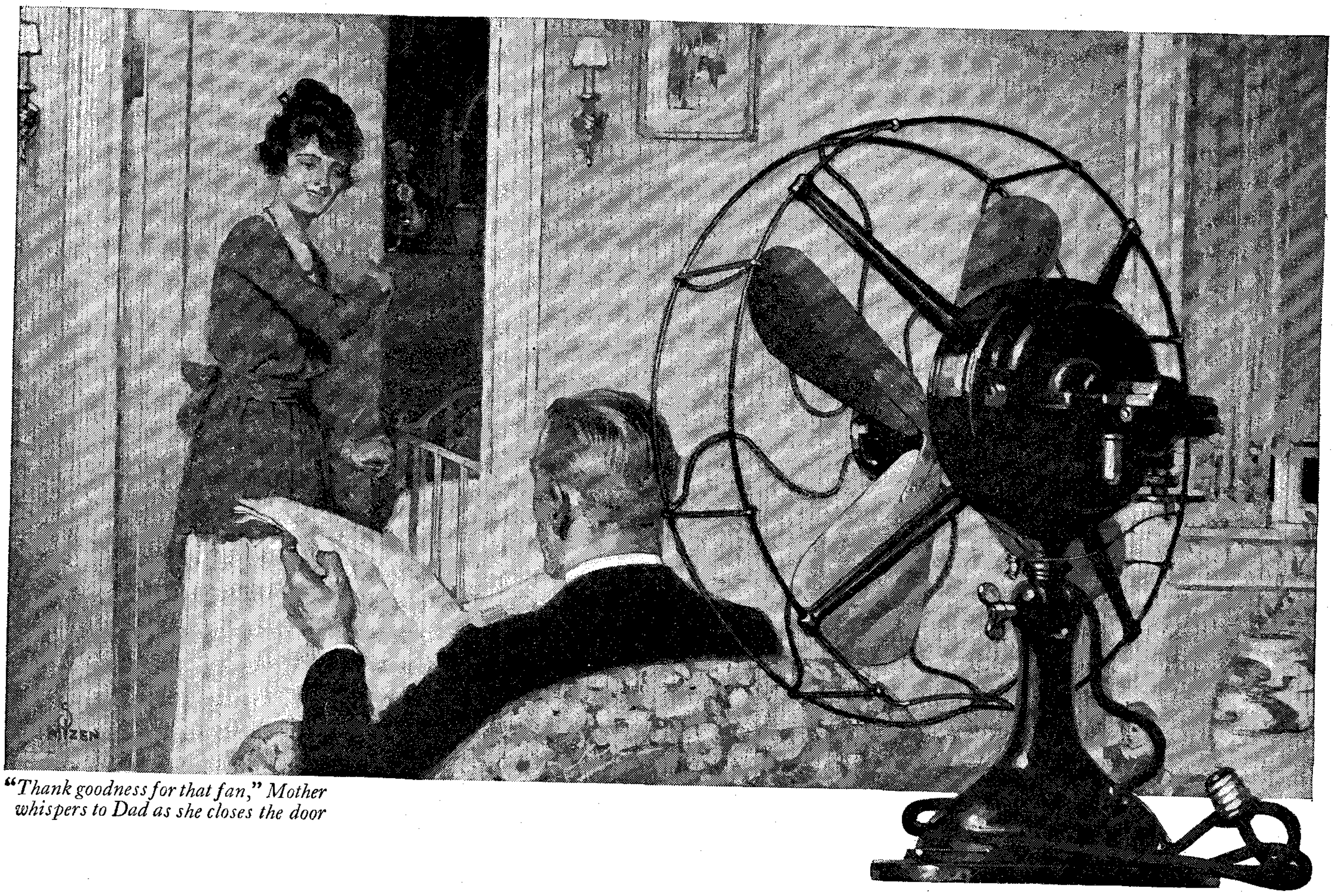

"Thank goodness for that fan," Mother whispers to Dad as she closes the door

"Now They Can Have Cool Nights of Sleep"

The door to the "kiddies'" room softly swings ajar. Mother takes a peek within. The children are sleeping soundly. A cool, refreshing breeze, produced by a silent Robbins & Myers Fan, sweeps through the room.

"Thank goodness for that fan," Mother whispers to Dad as she closes the door. "Now they can have cool nights of sleep and rest even in the hottest weather."

"It's a great idea, isn't it?" he agrees. "It is the same kind of a fan that we have at the office. Keeps everyone comfortable and good-natured. I'll buy one for our bedroom, too. They will last a lifetime."

Comfort in the home, comfort at the office, comfort everywhere during hot, stifling days and nights is furnished by Robbins & Myers Fans.

Silent producers of coolness, smooth-running and constant, R&M Fans are Nature's own allies. The R&M flag on the guard is a guarantee of their faithfulness—the sign of a breeze.

Look for the Robbins & Myers flag on the fans you buy. It is all you need know about a fan.

The Robbins & Myers Company, Springfield, Ohio
For Twenty-three Years Makers of Quality Fans and Motors
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age in 1900, and that he actually died in his 95th year—not in his 117th year.

With regard to the famous case of Thomas Parr, who died in 1635, and was said to have been 152 years of age, there is no evidence whatever except his own unsupported assertions. It is frequently said that Harvey, the discoverer of the circulation of the blood, testified to Parr's age; but Harvey merely stated that Parr appeared to be an aged individual and that his viscera were in vigorous condition. It is likely that Parr was in the neighborhood of one hundred years of age.

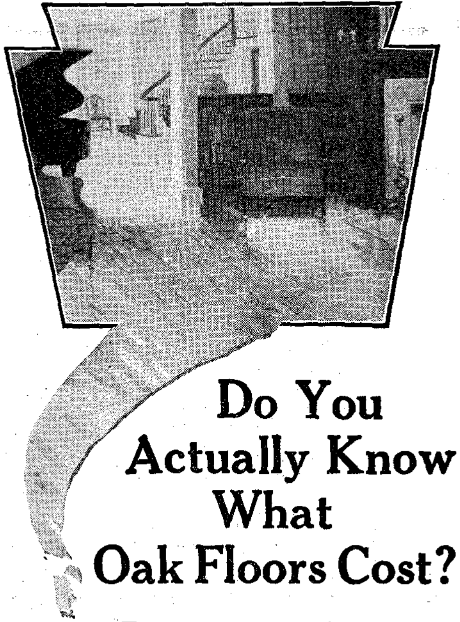
Actuaries are naturally skeptical regarding claims of such persons as Parr and Morris because the records of 150 years have not shown a single insured or annuitant who lived beyond 106. The difference between these persons and those who claim to have lived beyond that age is simply that the ages of the insured and the annuitants, especially the latter, are reasonably correct at the time the contracts are issued, whereas the others are basing their statements on memory, which must be weak when the century mark is approached.

CROSSING THE BACKBONE OF THE ANDES OVER THE PERUVIAN CENTRAL RAILWAY

FROM the tropics to the arctic and back to the tropics again, all in a single day, is the experience of the traveler over the world's loftiest standard-gage railroad, the Ferrocarril Central in Peru. Starting amid the cane-fields and banana-groves at Lima, the capital, and climbing up through the pines and cactus of the foothills, ascending in places at the rate of twenty-seven feet a mile, this road reaches an altitude of 15,865 feet at the point where it crosses the backbone of the cordillera among the bleak tops of America's mightiest mountain range, and on the way it passes through what is said to be the greatest variety of scenery to be found in one day's journey anywhere on earth. It is claimed that this road has overcome greater obstacles in its construction than any other railway, and the Peruvians point to it with pride as an indication of the development of their country, as it has taken place in Lima and other cities. We are told that the interior of Peru, however, still maintains enough of the picturesqueness found there at the time of the Spanish invasion to stimulate the tourist's imagination, and the journey over the Andes may well be compared to the viewing of a motion-picture of Peru's sociological development, run backward. The contrast between the state of civilization that has produced a triumph of engineering skill such as this road and the primitive state of most of the section through which the road runs is well brought out in an article by Harry L. Foster in *The West Coast Leader* (Lima) describing the people and scenes he observed on a recent trip over the Ferrocarril Central. "Even before the modern buildings and the cathedral towers of Lima have entirely disappeared behind the train, one may look from the car-window and see bamboo huts, with roofs of thatch," he says. He goes on and describes the town of San Bartolomé, three hours out and at an elevation of nearly six thousand feet:

> The people of San Bartolomé live principally by picking oranges off the tree and then lying in wait for the railroad passengers. These fruit-venders, incidentally, furnish the visitor with his first glimpse of the *cholo* or descendant of the Indians. They line the station platform, most of them women, all of them squatted cross-legged on the ground native-fashion, drest in a superabundance of clothes that leave you in doubt as to whether they are fat or thin, their hair down their backs in coarse, greasy braids, and on their heads white-felt, mannish Panama-like hats. Their faces are Indian-featured, ruddy and red-cheeked from the cool mountain air, and usually solemn and unsmiling.
>
> When they walk it is with a long, swinging, llama-like gallop, ungraceful and flat-footed—a system of locomotion inherited from their mountain-climbing ancestors, which, when transferred to the more level country of the foothills, gives one the ridiculous impression that they are still trying to skip from peak to peak.
>
> Every woman has a shawl over her shoulders, always with a heavy bundle behind the back. Frequently the bundle contains an infant, and invariably the infant is drest exactly like its mother, with the same superabundance of voluminous, gaudy-colored skirts, the same greasy braids of black hair, and the same mannish Panama hat. Its face has the same solemn, unhappy but resigned expression, and I always have the feeling that if it were put upon the ground, it would go galloping away with the same flat-footed, llama-like lope.
>
> The first time I stopt at San Bartolomé I stood on the platform surveying the peculiar people, and trying not to laugh, when one of these Indian mothers paused before me. She had just crawled under one of the cars, bumping the child's head on several iron bars during the crawling process, and the child, for once discarding its usual solemn expression, had opened its mouth to give vent to a series of lusty roars indicative of displeasure at the treatment. The mother seized upon my presence as a means of comfort for her offspring. Grasping its head firmly between thumb and forefingers, she rotated it upon its axis until the eyes were focused upon me.
>
> "Stop crying," she said, "and laugh at the funny gringo."
>
> Perhaps, after all, the *cholos* are merely strange and different rather than amusing or peculiar.

As the journey is continued, ever upward, a growing coolness in the air is noticeable, and the bamboo huts give way to solid *adobe* houses. The sugar-cane gives way to cactus, and when the most rugged portion of the road is reached "even the cactus dies out, and no vegetation breaks the forlorn grandeur of the mountains that tower far above the narrow cliff on which the train clings precariously." It is here the greatest marvels of engineering are found, among them being sixty-five tunnels through solid rock, totaling over five miles in length, and sixty-five bridges over seemingly bottomless ravines. Further:



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(for Everlasting Economy)

Do You Actually Know What Oak Floors Cost?

OF course you've always known that oak is the finest flooring material — in beauty, in durability, in cleanliness. And you have probably wished many times that your home, or office, or store, was graced by these lustrous and enduring floors.

But isn't it a fact that you have denied yourself because of an idea that oak floors were expensive? — that they were beyond the range of possibility for you?

Here, then, are interesting facts for *you*. Oak floors really cost *less* than good carpets! They are *easier* to keep clean and beautiful! They *increase* property values! They *last* for a hundred years!

We have published an Oak Floor Book which we want you to have and which we will send upon request. It tells how to lay oak floors over old, worn floors and contains other information you will be glad to have. Send for a copy today.

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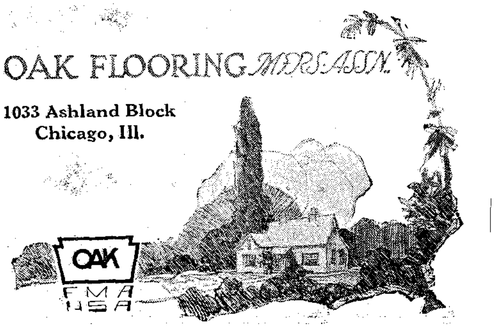

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Your home, wherever it may be, is right on the line of march of Sousa's Band—of Pryor's Band, Conway's, Vessella's, U. S. Marine, Garde Republicaine of France, Black Diamonds of London, of the greatest bands of all the world. And every band *plays* as it goes marching by—on the Victrola. Plays the very music you want to hear and gives you the same thrill!

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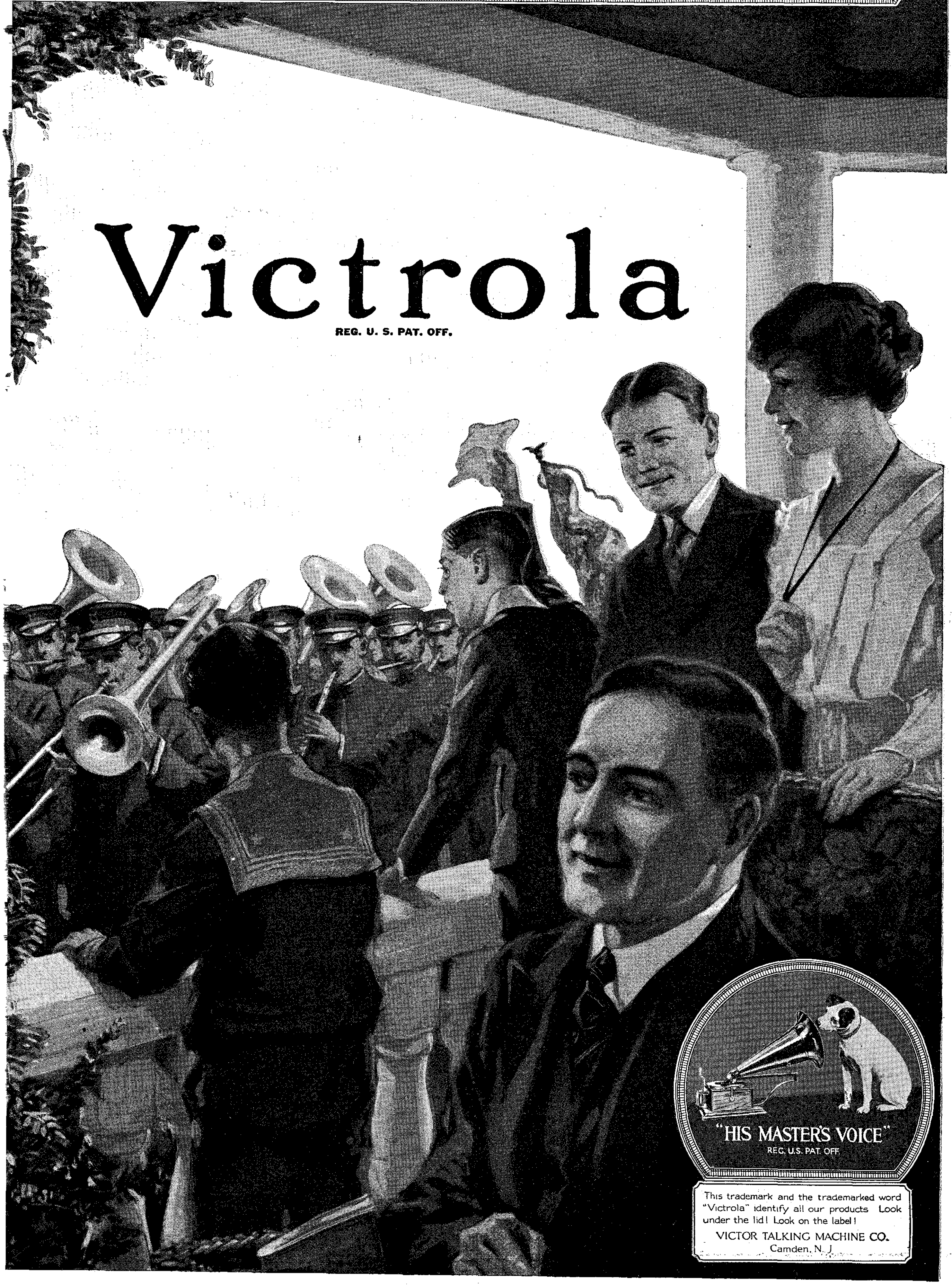
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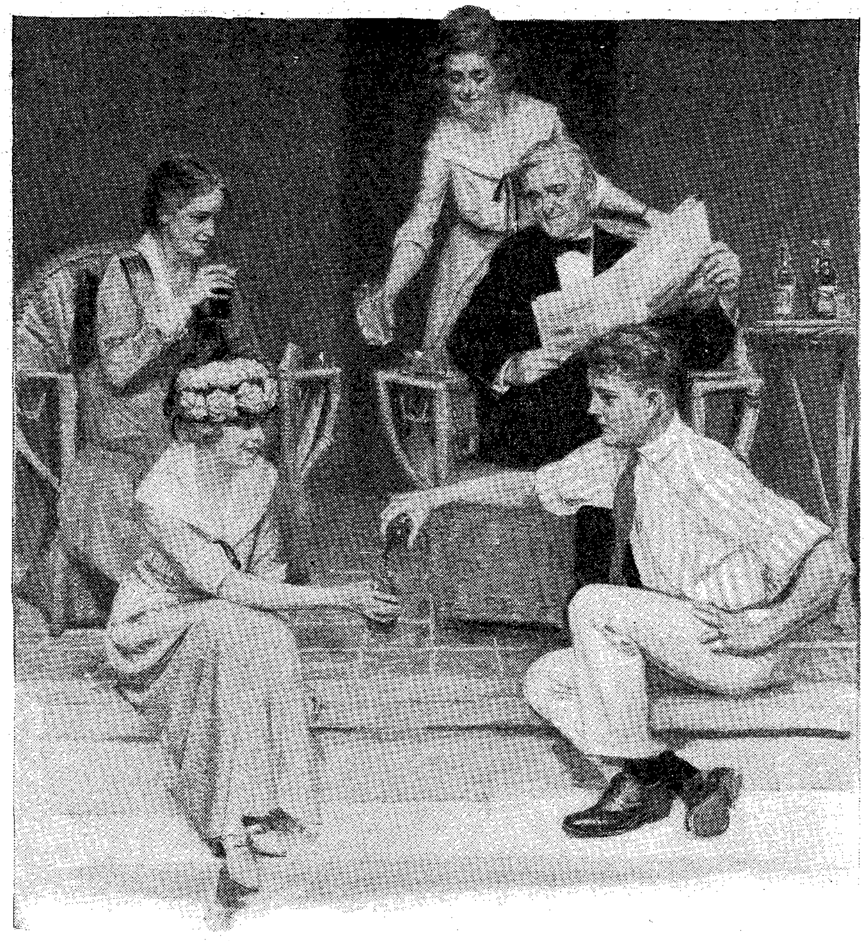


Hires *For the Nation's Homes*

HIRES, a fountain favorite, is now everywhere available in bottled form also. Hires in bottles for the home is the same good drink that you have found it at soda fountains.

Nothing goes into Hires but the pure healthful juices of roots, barks, herbs, berries —and pure cane sugar. The quality of Hires is maintained in spite of tremendously increased costs of ingredients. Yet you pay no more for Hires the genuine than you do for an artificial imitation.

But be sure you ask your dealer for "Hires" just as you say "Hires" at a soda fountain.

THE CHARLES E. HIRES COMPANY
PHILADELPHIA

Hires contains juices of 16 roots, barks, herbs and berries.

Hires
in bottles

PERSONAL GLIMPSES
Continued

Occasionally the bleak mountain ravines open out into valleys, with sides cut into terraces by the Incas, and an *adobe* town in the bottom that looks almost as old. At one of these towns, San Mateo, one begins to see the large herds of llamas, the burden-bearing animals of the Andes, that have heads like a camel, wool like a sheep, and legs like a deer. The llama is one of the few creatures that can survive the rigorous climate of the high altitudes, and his face registers great pride in the fact. The llama invariably wears a self-satisfied, sneering expression on his countenance, comparable only to the expression on a society woman's face when observing that her next-door neighbor is wearing a last year's hat to church. The only thing that keeps the expression from being perfectly aristocratic is the fact that the under jaw wags continually from side to side as tho chewing gum.

The llamas are remarkably docile. They sometimes fight among themselves, but never attack a man. They seldom wander from the spot where their keeper leaves them, and one may see them in large herds, untied and unwatched, awaiting the return of their master. On occasions, I am told, they have been known to spit at a keeper, causing very irritating sores from the saliva, for llamas are natural sufferers from various skin and blood diseases. Camels, to whom they appear to be distantly related, also carry the same ailments, as testified by acquaintances of mine who have served with British troops in Egypt.

If I have previously described the lope of the *cholos* as "llama-like," I probably owe the llama an apology. His walk is usually quite graceful, and distinct from the walk of most legged creatures in that the hind legs keep perfect step with the front legs. As near as I can figure out, he takes thirty-inch paces, 120 steps to the minute, according to the Infantry Drill Regulations of the United States Army, and can kick at a dog without losing the cadence.

The drivers are typical mountain *cholos*, barefooted and draped in the picturesque *poncho* made by cutting a neckslip in a square piece of cloth. They are accompanied always by their wives, who wear as many as twelve or sixteen skirts up here. As often as once a year sometimes they are known to take off the innermost skirt, wash it and put it back on the outside, altho I can not vouch for the frequency of this performance. As to bathing themselves, that is out of the question in such a chilly climate. There is a story of a party of gringos that gave their cook a bath—it was a male cook, by the way—and the experiment caused the man's death within two days from pneumonia.

One of the ways the traveler over this road has of telling that he is getting into higher altitudes is the fact that the fleas quit biting, says Mr. Foster. Fleas can't stand the rigor of the Andes. The only insects found in this region are in the second-class coach, we are told, where the natives while away the time by picking things out of each other's hair. There are also other signs of increasing altitude.

Usually one does not need the fleas to tell him that he is beyond the 13,600-foot level. There is a stinging in the nostrils

PERSONAL GLIMPSES
Continued

from the rarefied air, and perhaps a sensation of dizziness that increases to a pronounced headache as one mounts toward Ticlio, the highest station on the road. The women begin to get out smelling salts, and the men call for *pisco*. The latter remedy is considered the better, and if taken in sufficiently large quantities, will convince one that he is down in the tropics again, except that the lizards and other reptiles are blue with pink tails.

The only genuine cure for this mountain sickness, or *soroche*, as it is commonly called, is to let it wear off. With most people it lasts only two or three days, characterized by a heavy pounding of the heart, pains in the head, and sleepless nights. Some escape it entirely. With others it lasts longer. I know of one woman whose only indication of it was a daily faint, from which she recovered in a few minutes, and felt nothing more until she fainted the next day. She fainted every day for a month, after which she felt fine.

Ticlio, the highest station on the road, has an altitude of over 15,000 feet. Just beyond it lies Mount Meiggs, named after the American who built the railways. This mountain is the real divide in the cordillera. To pierce it, there is a tunnel 3,857 feet long, in which one reaches the highest point on the main line, at an altitude of 15,665 feet.

After passing the divide, the traveler did not find the scenery so interesting during the descending portion of the trip. The mountain sides were covered with damp moss, torrential showers obscured the view, and the whole scene was desolate and depressing. Eventually they reached the city of Huancayo, where Mr. Foster had some interesting adventures:

In the first place, the conductor evidently had never seen a pass before. Instead of merely having me sign a book, as is customary on the Central, he took my pass, folded it sixteen times, and punched half a dozen holes in it. The resulting product was similar to the work of a kindergarten teacher when she amuses the children by folding a piece of paper, clipping it with the scissors to make a string of dancing doll-babies.

I was surveying it ruefully, and trying to figure out how the next conductor would recognize it, when my reveries were interrupted by a crash, and eleven large rocks fell in through the windows. The rain, it seems, had started a small landslide on the cliffs above the car. Fortunately, no one was hurt.

The line here descends rapidly into the warmth of the lower altitudes. About an hour's ride brought us to Jauja, at a height of 3,387 meters above sea-level. Jauja is a great resort for consumptives. Its natives also raise potatoes, many of which are purple-spotted as tho suffering from the same ailment as the city's guests.

We were at the Jauja Station when a buxom *chola* girl rapped on the car-window beside me, and said, "*Llevame contigo.*" It means, "Take me with you." This seemed to be the culminating point in the night's adventures, but as she did not appear to be a necessary portion of a newspaper correspondent's equipment, I continued the journey alone.

The train pulled into Huancayo at 11 P.M., long after the city had retired for the

An alarming condition among American children

School authorities say one child in every three —rich and poor alike—is undernourished

FROM no less an authority than Dr. Thomas Wood comes the alarming statement that no fewer than 5,000,000 of America's school children are suffering from malnutrition. Dr. Wm. R. P. Emerson says the number *undernourished* is greater than that—one child in every three!

Fathers and mothers who live in cities may think it's a condition of the poor; but statistics show it equally prevalent among the children of the moderately well-to-do and the children of the rich.

In country and city

Parents who send their children to country schools may lay the blame on city life; but, says Louise Stevens Bryant, "rural school children on the whole show a higher percentage of malnutrition than do city children."

Wherever you live, whatever your circumstances, the chances are about one in three that *your* child is among these millions handicapped.

Lack of sufficient food is not necessarily the cause of this condition. Most often it comes from lack of food of the right kind, from an insufficient supply of certain food elements.

The 16 vital elements

Sixteen natural food elements are needed to keep the normal human being strong and well and filled with that abundant vitality which provides for growth and the warding off of disease.

In the wheat grain Nature provides these sixteen vital elements in more nearly the proper proportion than in any other food, save possibly milk.

But many of the most important of these are lost in modern methods of wheat preparation, through removal of the six outer layers of the wheat grain, commonly called the bran.

We lose too many

We get a considerable part of the protein, the starch and the fat; but we lose practically all of the mineral elements which our bodies indisputably need—the iron, for instance, which makes red blood to carry the oxygen upon which all of the energy-yielding processes of nutrition depend—the calcium and phosphorus which build the bones and the teeth.

Only in the whole wheat grain can *all* the needed elements be secured.

How Nature tempts us

Nature tempts us to take these elements of energy and health—tempts with delightful tastes and flavors

As in Pettijohn's, a whole wheat breakfast food, rich and gratifying to the palate

Its steaming fragrance awakens sluggish appetites in old and young alike.

For its nut-like sweetness children love it, for its abundant nourishment grown-ups prefer it.

With cream and a bit of sugar, if you wish, it makes a vital energy ration of luscious flavor.

If you have a child who shows any of the signs of malnutrition (see panel)—try Pettijohn's.

If you yourself have been feeling below your normal in vigor and vim—try Pettijohn's. Perhaps with you it's simply a matter of relieving congestion of the intestinal tract. Pettijohn's with its natural bran laxative will soon set you right.

Your grocer has Pettijohn's—or will gladly get it for you. Make tomorrow's breakfast of this sixteen-vital-elements food.

Made by the Quaker Oats Co., 1627H Railway Exchange Building, Chicago, U. S. A.

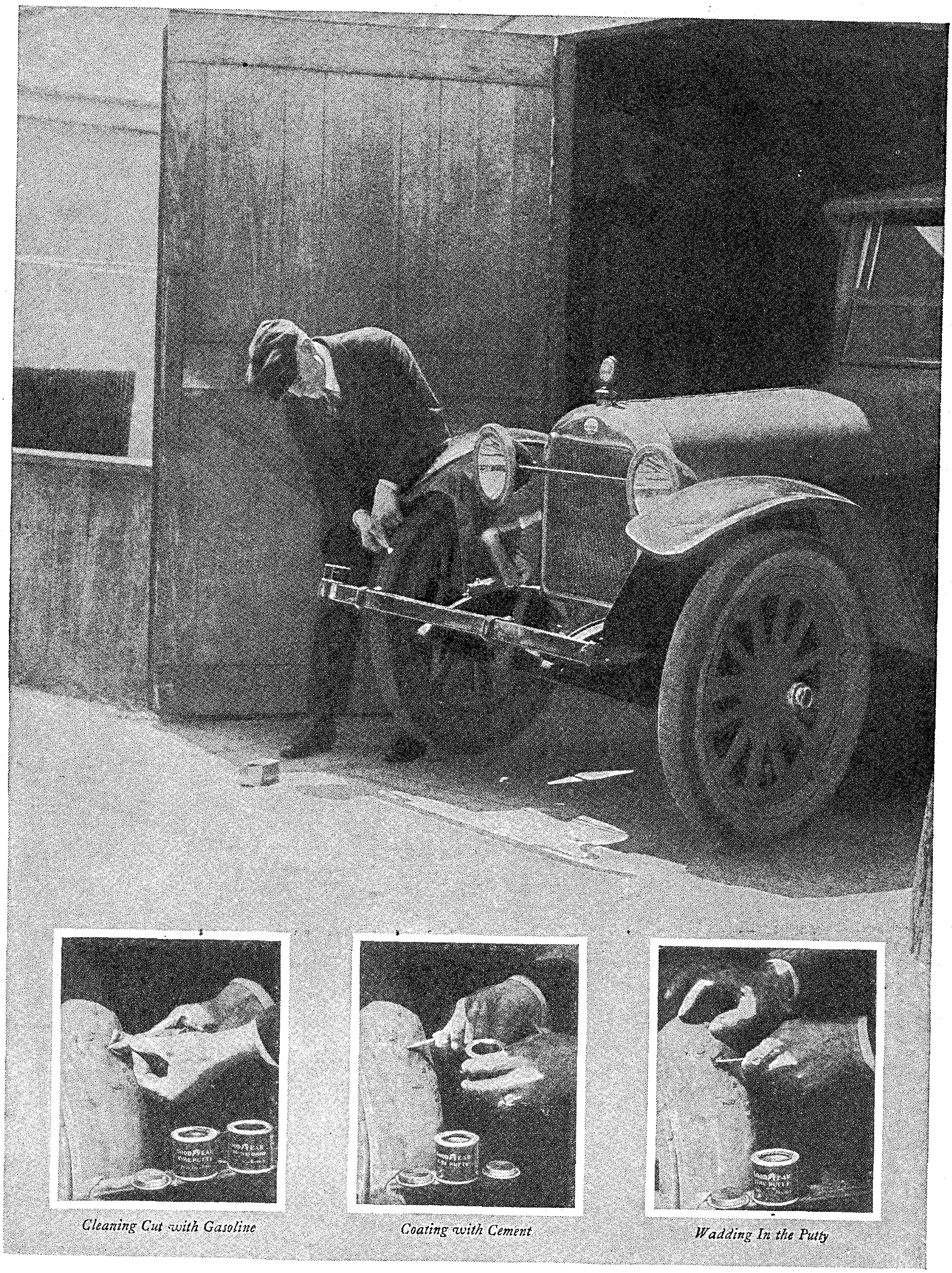
An official in Chicago's public schools has said: "It is noticeable that the children of special rooms for backward children give evidence of malnutrition. The backward child is usually a case of malnutrition.'

Is your child

Run down
Frail
Delicate
Under-developed
Pale
Always tired
Easily upset
Irritable
Backward in school
Not himself

?

These are signs of malnutrition! The chances are your child needs more of the sixteen-vital-elements food.



Cleaning Cut with Gasoline

Coating with Cement

Wadding In the Putty

Illustration shows a tread cut being repaired in a home garage using Goodyear Tire Putty and Cement. Complete directions for repairing all tire and tube injuries are given in Goodyear's Tire Conservation Lessons

Copyright 1920, by The Goodyear Tire & Rubber Co.

GOODYEAR

Your Part in Goodyear's Plan of Service

"I believe the use of Goodyear Tire Putty and Cement has helped me to get more than 4,000 miles extra from one of my tires. The Goodyear people persuaded me to buy and keep the Tire Putty Outfit in my car and showed me how to use it. I'm glad they did, because I sealed a bad 2½-inch glass-cut with this putty. Since then the tire has given 5,000 more miles and is still in service, although it surely wouldn't have lasted for another 1,000 miles except for the use of the putty."—C. A. Seelman, 5629 Drexel Ave., Chicago

THERE are included in the Goodyear Service Plan three fundamental elements: the building of a fine tire, its convenient distribution, and an effort to help users exact every possible mile.

The first element is accomplished in the Goodyear factories, where every phase of manufacture is so safeguarded that in use these tires will protect our good name.

The second element, that of convenient distribution, is effected through those thousands of Goodyear Service Station Dealers everywhere who deem your satisfaction the most valuable factor in their business.

The third element in the plan endeavors to increase tire mileage for the user, and is most effective in those cases where the user lends it his full support.

So, Goodyear Dealers teach the causes of premature tire failure; they provide lessons on tire care; they will supply you with Goodyear Tire Savers and teach you how to use them.

Your part in this plan is to take advantage of their advice and carry tire savers in your car, so that when necessary, you can repair tire injuries either on the road or in your own garage.

At the nearest Goodyear Service Station Dealer, ask for advice and for the six Goodyear lessons on tire care; and stock your car with tire savers—these provide the means to greater tire mileage.

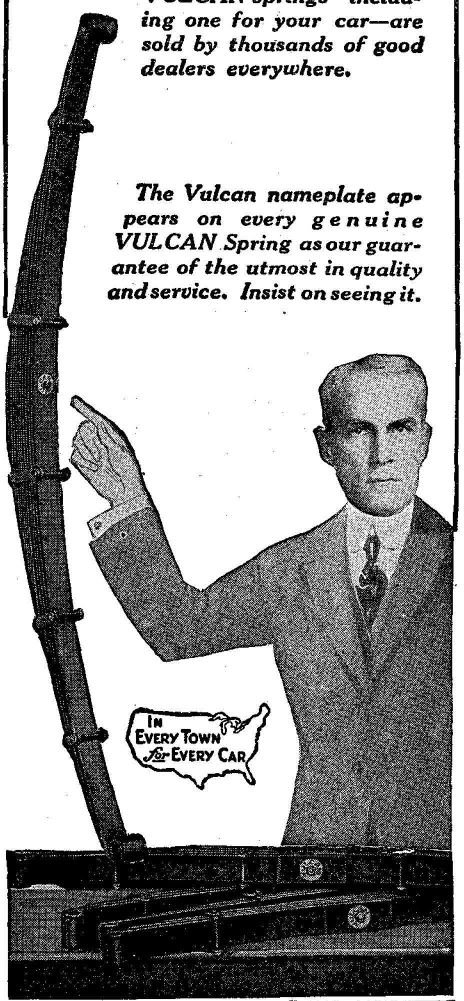
TIRE SAVERS

When Your Springs Break
put on
VULCAN
QUALITY
The Replacement Spring

. . . THEN you may drive with well poised assurance that your time, your car and your life are safe.

VULCAN springs—including one for your car—are sold by thousands of good dealers everywhere.

The Vulcan nameplate appears on every genuine VULCAN Spring as our guarantee of the utmost in quality and service. Insist on seeing it.


In Every Town & Every Car

Jenkins VULCAN
Spring Company
Richmond, Indiana.

PERSONAL GLIMPSES
Continued

night. It was drizzling, and streams of water flooded over the cobbled streets. The street-lights, always faint in Huancayo, were not working that evening. It gave one a most unfavorable impression of the city, an impression that proved entirely faulty when one awoke the next morning to find himself in the most picturesque place that I have yet seen in Peru.

Huancayo is an exact reproduction of Central America. When one awakens in the morning and looks out to see the *adobe* buildings with red-tile roofs, and the cobbled streets that slope to a ditch in the center, and the lean, black pigs strolling about, one has to rub his eyes and stare again to convince himself that he is not in Cartago, Costa Rica. The only thing lacking is the rumbling ox-cart, with heavy wheel of solid wood.

Huancayo has an altitude of 3,260 meters, about the same as San Mateo on the nearer side of the Andes, but its vegetation is much more tropical. The predominating plant is the maguey cactus, that has broad bluish leaves, pulpy in texture, and with saw-tooth prickers along the edges. This plant also has a huge bulbous root which is used in Mexico in the distillation of *pulque*, *mescal*, *tequila*, and other fiery beverages guaranteed to make any third-class bandit chief slap himself on the chest and declare himself President of the Republic.

The maguey is not used at all in Huancayo, where the principal native drinks are *chacta*, a raw rum made from the sugarcane, and *pisco*, a grape brandy. The *cholos* also drink a great deal of *chica*, a corn product which tradition says is made by first chewing the corn to promote fermentation.

A stroll through the narrow lanes on the outskirts of the town strengthens one's impression that he is again in Central America. These lanes wind and twist out into the farming land—narrow lanes, with a high mud wall on each side, and a double row of tall, slim poplar-trees. The top of the wall is effectually reenforced by spikes of cactus, usually maguey that serve quite as effectively as barbed wire to keep one from climbing over.

There is something peaceful, quiet, and unhurried about these lanes that makes one want to spend weeks there. It is fascinating to perch oneself on a spot on the wall—preferably a spot where the cactus is not growing—and watch the peons pass with their two or three burros, or a flock of sheep. The women of Huancayo, in contrast to the other women of the Andes, always wear blue skirts. Occasionally one sees a varicolored skirt, as in other towns, but it always stamps its wearer as a stranger in Huancayo, for the natives wear nothing but blue. The old women and the children pause courteously to bid you "*buenos dias*," but the young ones take a quick, excited look at you, edge over to the farther side of the alley, and run past. As I do not wear a little black mustache or possess that oily city manner described in the ballads, it made me wonder what gringo had been there before me to cause so much terror.

I was standing on the long stone bridge over the Florida River that runs through the center of the city, watching the squaws pounding dry the washed clothes down in the deep ravine below me, when one of their husbands called her by beckoning in the Peruvian fashion, which consists in waving the hand in just the opposite direction from which we customarily wave it in beckoning. She immediately came up the path at a swift jog-trot, and paused obediently at his feet. These Huancayo wives are so well trained that when hubby calls they do everything but click their heels together and salute.

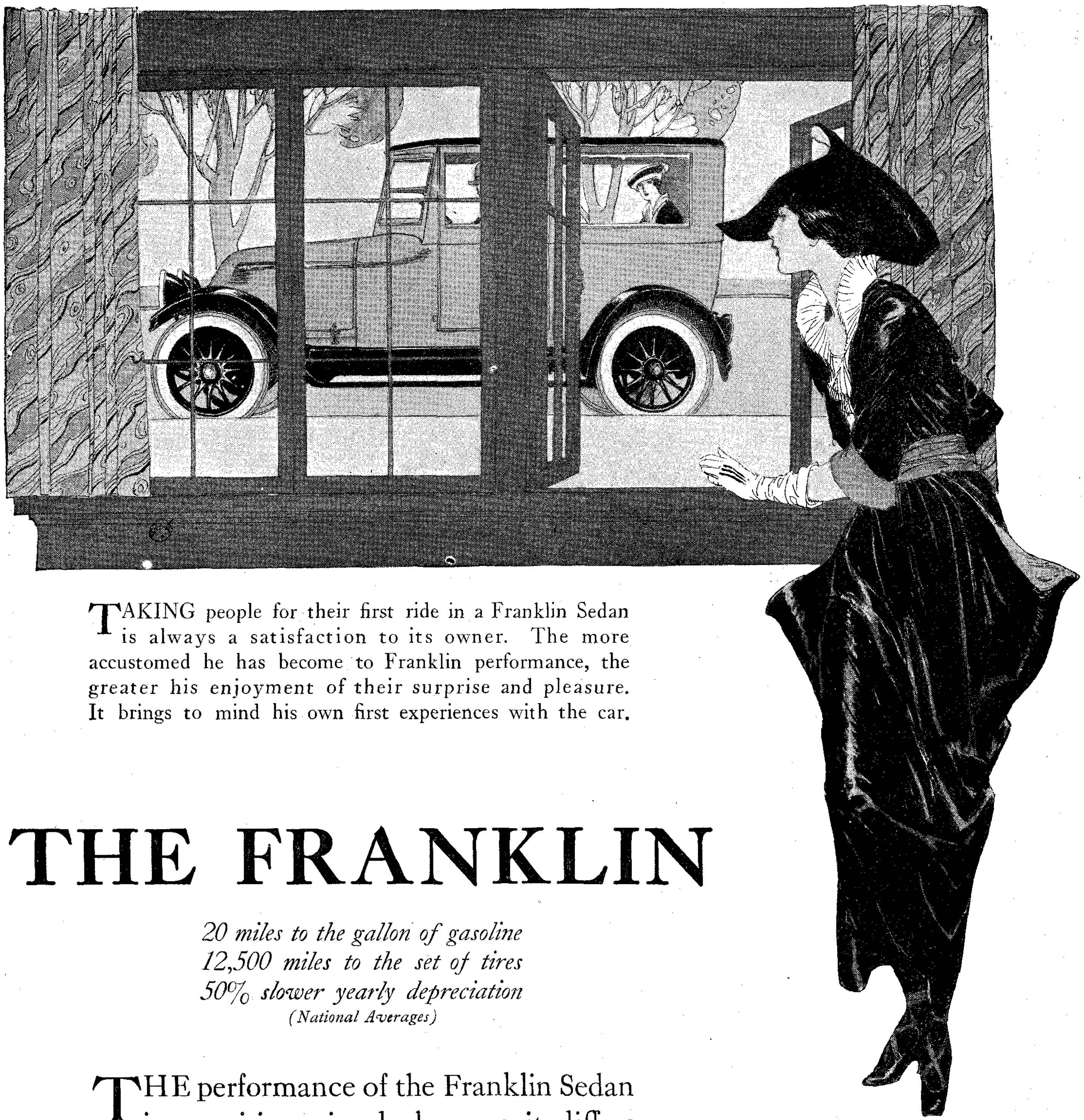
"After you finish the washing," he told her, "you will carry those four sacks of potatoes down to the store, go out to the pasture and bring in a bale of hay for the burro, feed the chickens, get the pigs ready for the market, and chop some wood. I'm going to the saloon."

"Yes, sir."

"Look out for this gringo. I think he's trying to flirt."

The most notable event in Huancayo's week is the Indian market, held on Sunday, when the natives from a radius of fifty miles come to town to sell their wares. They sit cross-legged on the ground with their wares spread out before them, consisting of llama-hides, fruits, vegetables, clothing, household utensils, and an endless variety of other things. The scene presents a colorful picture:

> A perfect bedlam reigns in Huancayo during the market-day, the pushing and jostling of the crowds, the noise of the many haggling voices, the squealing of the pigs as they are dragged to the market, the hee-hawing of the burros as they plod along, completely hidden in the mass of stuff strapt to their little backs, the roaring of the bulls in the cattle-yards, the squashing of thousands of bare feet through the muck and mud of the plaza—all the various rackets combining to make a riot of sound that eclipses a menagerie at feeding-time.
>
> Through the crowds stalk the *alcaldes*, or mayors, of the different Indian villages, their rank indicated by the staff that they carry, a staff of black wood encircled by three silver bands. Except for this staff, there is nothing to mark them as rulers, for they generally are as barefooted, mud-covered, and whisker-draped as the rest of their tribe. Sometimes they sell stuff like their fellow townsmen, but more often they drape their dirty *poncho* around them with a Roman-toga effect and stand by themselves with an air of great hauteur and authority.
>
> As a rule, each village specializes in the manufacture and sale of one certain article, and the members of each village group themselves apart. As a result, one may notice a sameness of types in each group that contrasts strikingly with the type of the group next door. In one spot will be a line of women with large noses selling vicuna-skins. In the next group will be a line of cross-eyed women selling native embroidery. In the next group will be a line of pock-marked women selling *coca* leaves. The one thing they wear in common is the blue skirt and the layers of mud.
>
> Altho most of the people are short and stocky like the *cholos* of the higher Andes, one sees many new and distinctly Indian types. There was one party of tall, rangy Indians drest in knee-pants, with packs on their backs, that had evidently come in from the Chanchamayo country. As they tramped in a body through the main street an automobile passed. Every one of them stopt with his mouth wise in all matters.
>
> "What makes it run"? asked one of them.
>
> The *alcalde* straightened himself with the air of one wise in all matters.
>
> "Wind," he said convincingly.



TAKING people for their first ride in a Franklin Sedan is always a satisfaction to its owner. The more accustomed he has become to Franklin performance, the greater his enjoyment of their surprise and pleasure. It brings to mind his own first experiences with the car.

THE FRANKLIN

20 miles to the gallon of gasoline
12,500 miles to the set of tires
50% slower yearly depreciation
(National Averages)

THE performance of the Franklin Sedan is surprising, simply because it differs from what a motorist has grown to expect.

Its comfort remains even when good roads end; its reliability does not vary with the seasons; its economy is inherent.

Franklin light weight, flexibility and direct air cooling are the reasons behind this. Eighteen years of uniformly fine service and 50,000 satisfied owners are the proof.

No car but the Franklin can show such owners' results as those quoted above.

FRANKLIN AUTOMOBILE COMPANY
SYRACUSE, N. Y.

Franklin Sedan Features:

Wide Observation Windows, allowing unobstructed outlook—

Two Wide Doors, giving easy access to a roomy interior—

Slanting V-shaped Windshield, permitting broadest driving vision—

and Sloping French-style Hood.

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The American Express Tours and Cruises are planned and carried out with conscientious regard for the personal comfort and pleasure of each traveler. All accommodations are the best available. Experienced conductors, branch offices and connections around the world, and advance reservations make touring a pleasure for American Express travelers.

The Orient tours arranged for next fall include visits to Japan, Korea, Manchuria, China, The Philippines and Java. Each party limited to fifteen. Departures from San Francisco, September, October, November and December. Special cruise to the South Sea Islands sailing October 20.

Around the World Six tours visiting the principal cities of the world. Four will start in September, October, November and December sailing west, and two in October and November sailing east. Parties limited to twelve. All accommodations the best available.

Independent and conducted tours to Europe, South America, California, and Florida.

Information may be secured by writing Department S.M. of the American Express Company, 65 Broadway, New York.

American Express Travelers Cheques Talk in Every Land and Language

Go to any of the four corners of the earth and present an American Express Travelers Cheque in payment of a purchase or hotel bill.

The Merchant or hotel proprietor may not speak your language but he understands the value of the Travelers Cheque you offer and accepts it without question.

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A Chinese merchant may question your "Green Back" but not an American Express Travelers Cheque.

Cheques are issued in three forms. For use in Great Britain and the British Colonies—Pound Sterling Cheques in amounts of 5 and 10 pounds. In France and its colonies, French Franc Cheques in amounts of 200 and 400 francs. For use in North and South America, the West Indies and the Orient, Dollar Cheques.

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PERSONAL GLIMPSES
Continued

As Sunday afternoon draws to a close the merchants pack up their unsold wares, and the general exodus begins. By Sunday night Huancayo is as quiet again as it was before, and for another week will present the quiet aspect of a Central-American town.

JOSEPHUS DANIELS WAS ONCE A POTENTIAL BABE RUTH

WHEN Secretary Daniels was a boy, he recently confessed to an inquiring newspaper correspondent, he had two ambitions. Those who think that one of them was to become the ruler of Uncle Sam's Navy, or even to make that Navy bone dry after he had become the ruler of it, are entitled to another guess. One of the future Secretary's ambitions was to hear a good brass band play every day. The other was to own a baseball team. "As Secretary of the Navy I have realized my two ambitions," Mr. Daniels modestly admitted. "I am manager of some of the best baseball teams in the country, and I can hear a good band whenever I want to, for in the Navy we have some of the finest bands in America." The Navy also produces a good variety of baseball, added the Secretary, and was moved to confess to his interviewer, Fred Lockley, of the Oregon *Daily Journal* (Portland), he had once aspired to be a star of the diamond. As Mr. Lockley chattily tells the story:

> They say that Gotham is "Babe Ruth" crazy, and that his exploits are as much discust as the Presidential possibilities. Babe Ruth may be popular with the fans, but the following quatrain from *The Baseball Magazine* proves he is not popular with the pitchers:
>
> We do not love thee, Big Babe Ruth.
> We love thee not, and that's the truth.
> Thy batting ways are most uncouth—
> We rue the day we met thee, Ruth.
>
> I know of one man who is a Ruth fan, and that is Josephus Daniels, ex-baseball player and at present holding down a base as Secretary of the Navy. Probably no man in the United States follows the champion baseball games with closer interest than Mr. Daniels.
>
> "When I was a boy," said Secretary Daniels to me recently, "my ambition was to be a professional baseball-player. I was born May 18, 1862. My father died in 1864. Mother was left with three boys to raise. Frank, who is now a judge in North Carolina, was the eldest boy. I was the second, and was named Josephus, for my father. Charlie is the youngest. Our home in North Carolina was twice burned by Yankee soldiers. After the war mother went to a little village called Wilson, in North Carolina, where she opened a millinery store. You can imagine that the selling of hats in a village of a few hundred people did not bring in much of an income.
>
> "When I was about six years old my mother was appointed postmistress at Wilson. Her compensation depended upon the amount of stamps canceled. The

PERSONAL GLIMPSES

Continued

office paid her several hundred dollars a year. After what we had gone through this seemed as tho we were living on Easy Street. All three of us boys worked in the post-office. My particular job was to light the fires in winter and do the janitor work. When I was a little older I helped to distribute mail, and after school and on Saturday I waited on the general delivery window or the money-order window.

"In those days it was a problem for boys to get any money to buy baseballs and bats. Mother let me have a corner of the lobby, where I ran a news-stand, selling magazines and papers. This made me a little money, which I was allowed to spend on baseball equipment. I held down first base. I was a good catcher and rarely muffed a ball. I was a better catcher than pitcher. There were two baseball teams in our town, the Swiftfoots and the Red Hats. I was captain of the Swiftfoot nine. I was simply crazy about baseball. Every spare minute I could get from my work at the post-office or school I was out practising, batting flies or trying to develop curves. The boys' mothers made uniforms for them. We wore red and white caps and red-flannel shirts. I marvel at it now how we ever could have played ball in those hot July and August days with our heavy red woolen shirts on. In those days we had no masks, nor did the catchers wear mits. but in the season my hands would be as hard as leather. From the profits of my news-stand I helped finance our team, and I was always entrusted with the job of buying equipment and arranging the matches with other teams.

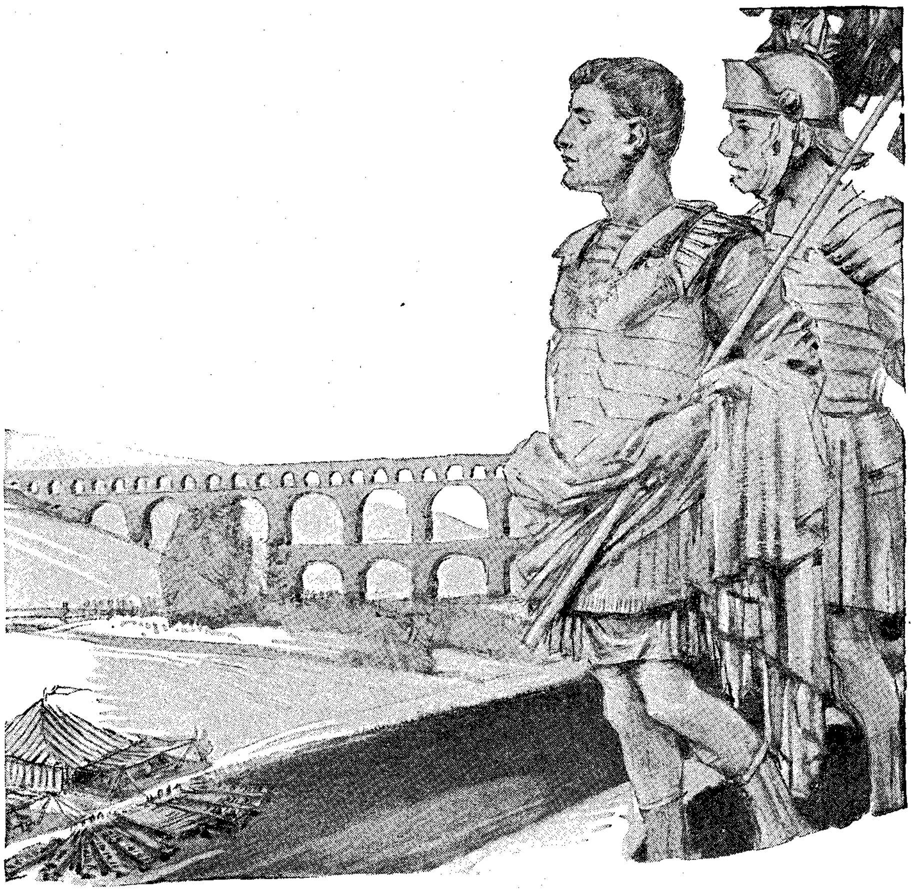
"By the time I was sixteen we had developed a pretty good team—so good, indeed, that we traveled around the country playing matches with adjoining towns. I can remember very distinctly a trip we made to Snow Hill, about thirty miles away. They had what was supposed to be a crack team. Our challenge to them was accepted. No general was ever more anxious over the results of an impending battle than we boys were over the results of our game with the Snow Hill team. We hired a pair of mules, borrowed a farm wagon, and put in planks across the bed of the wagon, and drove the thirty miles to Snow Hill and played the game. I was captain of the team, and if ever a leader felt the responsibility of leadership I did. I doubt if there ever was a happier baseball team than we as we started home that night after winning the game. In those days, if we kept the score down to fifteen to twenty we considered it a close game. By the end of the season we often played a game where the score would be ten to twelve. We thought that was marvelous playing.

"In 1885 I moved to Raleigh. The necessity of earning money to continue my schooling caused me to take a job in a newspaper office, and so the career of a promising baseball-player was wrecked."

A Good Boy.—Boy—"You have a vacancy for a boy, I believe, sir?"

Boss—"Yes; but I tell you at once it must be a boy who never tells a lie, never swears, and never gives a discourteous answer."

Boy—"I'll send my cousin, sir. He's deaf and dumb."—*Kasper* (*Stockholm*).



The Lands that Caesar Trod—

THE more you look into the matter, the more you will be surprised at the number and variety of maps published by RAND McNALLY.

It seems as if you could not possibly wish for a map that isn't issued at Map Headquarters.

Here, for instance, is a map of Ancient Gaul, showing the lands that Caesar trod—marking the lines of his advance into Britain and the dates at which certain points were reached.

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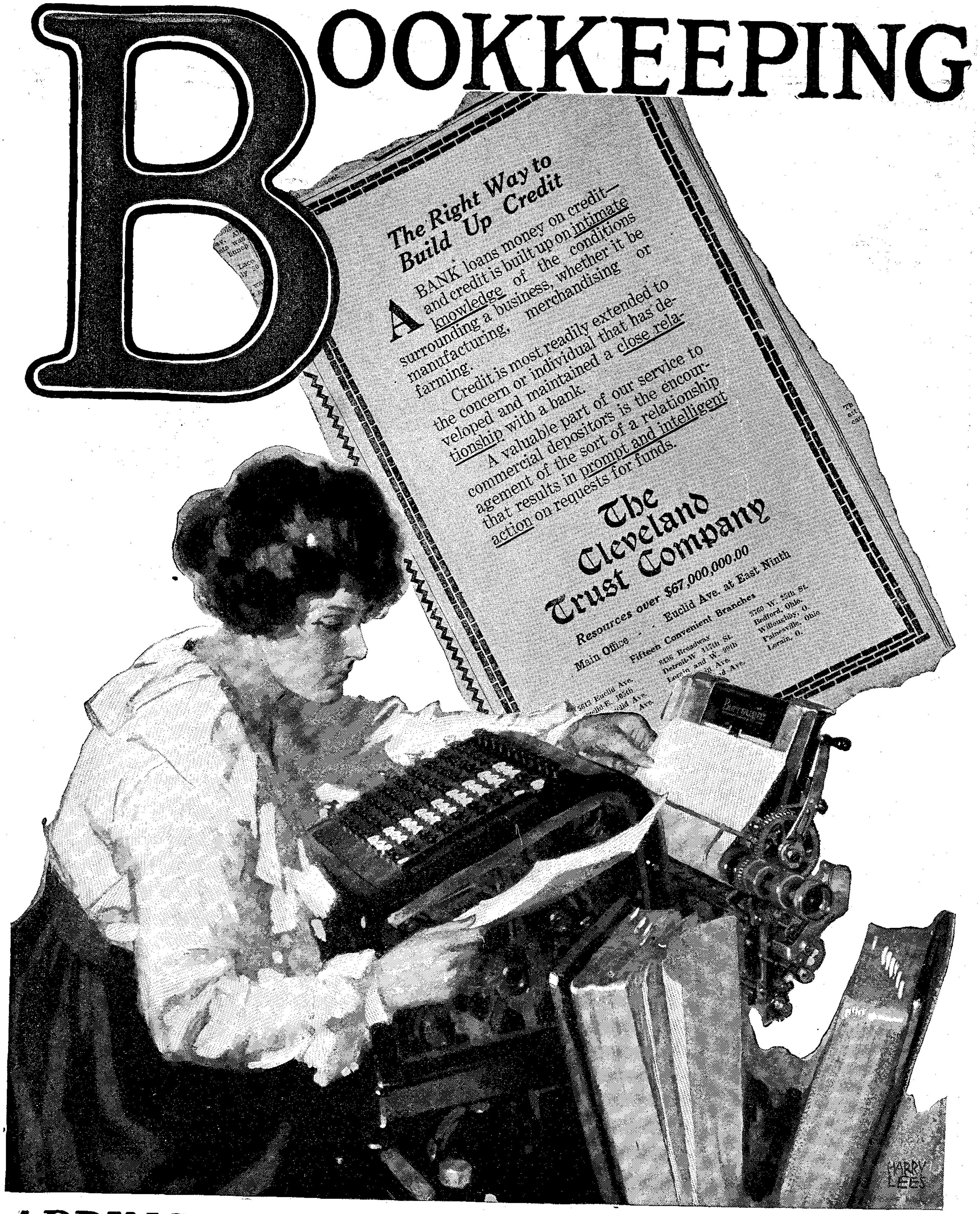

The Right Way to Build Up Credit

A BANK loans money on credit—and credit is built up on intimate knowledge of the conditions surrounding a business, whether it be manufacturing, merchandising or farming.

Credit is most readily extended to the concern or individual that has developed and maintained a close relationship with a bank.

A valuable part of our service to commercial depositors is the encouragement of the sort of a relationship that results in prompt and intelligent action on requests for funds.

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Lorain, O.

ADDING - BOOKKEEPING - CALCULATING

A-B-C

is a Builder of Credit

BUSINESS success is based on credit—on the faith your bank, your creditors, your customers, your dealers, and your own organization have in your ability to make good what you promise and to pay what you owe.

Credit, in turn, depends on certain definite factors. These are outlined in the advertisement of a widely known bank—The Cleveland Trust Company—which is reproduced on the opposite page. Let us analyze what they say—

Intimate Knowledge

How can your banker get that knowledge of your business? Only by your having it yourself.

Users of Burroughs Bookkeeping Machines have that knowledge. Every day the balance on every account is automatically computed and *printed right on the ledger* when the account changes. Having this daily balance a trial balance is always available on short notice. The business man can show anyone his inventory, his accounts payable and receivable, his cost of doing business and his fixed assets.

Close Relationship

The speed and automatic accuracy of Burroughs Bookkeeping Machines keep their owners in closest relationship not simply with their bankers, but with their creditors, salesmen, factories and customers.

On the other hand, a man who has no such prompt, accurate figure facts at hand would hardly know his business if he met it on the street some morning, or if his creditors should call to look at the books.

How can he expect to maintain that close relationship with his bank which is the foundation of credit?

Prompt Action

If your records are behind, if your books are unbalanced, if you haven't had a trial balance in six weeks, prompt action in placing an order, extending credit, collecting bills over due, insuring stock or borrowing from a bank is very difficult.

In such a case a man has to choose between delay and unintelligent promptness, on which neither underwriters, bankers or insurance men care to place a risk.

But automatic bookkeeping makes prompt and intelligent action easy.

The Cleveland Trust Company would be one of the first to assure you that they will always accord a hearing to the man who knows his own business.

Furthermore, that they believe in the necessity of up-to-date bookkeeping methods is shown by the fact that they use Burroughs Machines in their own institution.

This subject is so vital to successful business that you'll be interested in further facts relating to the function of Burroughs Machines as builders of credit.

Burroughs Machines—including Adding, Bookkeeping and Calculating Machines—are made in many styles and sizes to fit the figure needs of every business.

Call up the nearest office of the Burroughs Adding Machine Company or write to the main office at Detroit, Michigan, and ask for information.

The salesman who calls will tell you what machines you can use and how to operate them to the greatest advantage in your particular business.

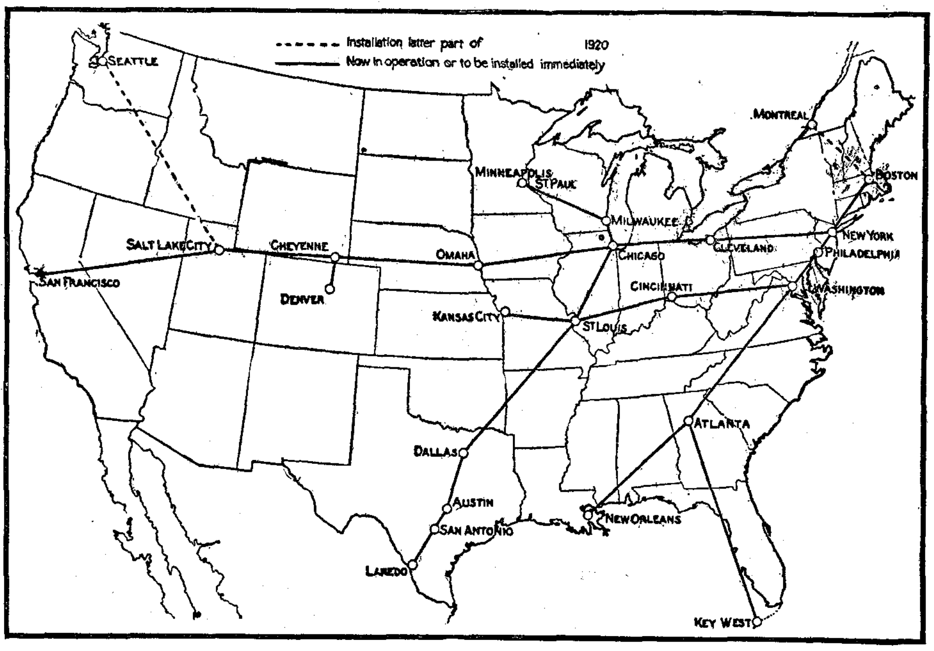
MACHINES FOR EVERY BUSINESS

Burroughs

MOTORING AND AVIATION

MAPPING AIR-ROUTES FOR COMMERCIAL FLYING

OPTIMISTIC PROPHETS have been predicting for some time that eventually all kinds of transportation by air will be as common as the messy but useful railroad train. The prediction seems to be in a fair way to come true in at least one line, the transportation of mail. Uncle Sam is now carrying nearly 100,000 letters a day by flying-machine, we learn, the establishment of new air-routes is being announced every few days, and elaborate plans for extension of the service to even the most remote sections of the country are under consideration. For instance, a few days ago four *De Haviland 4-B* machines, under the command of Captain St. Clair Street, started from New York to distant Nome, Alaska, to map out an aerial route to the northwest corner of the American continent. When the party reaches its final destination it will be only fifty miles from the continent of Asia. Regular air-mail service has been in successful operation now in the eastern section of the United States for some nineteen months. Eight mail planes make daily trips, flying 1,906 miles every twenty-four hours, and all the great cities of the land are already linked up by air-routes as definitely as they are by railroads. It has just been announced that in September direct air-mail service between New York and San Francisco will be established. Speed is the big advantage of transportation by airplane, but economy also is claimed. The mail now being carried by this method is advanced from sixteen to twenty-four hours, we are told. It is 218 miles by air from New York to Washington and a little more than 226 by rail. Letters by express take about six hours, and by the air-route they take in transit from two and one-half to three hours. One flies from New York to Cleveland in from four and one-half to five hours, but it takes from thirteen to seventeen hours by rail. One feature of the air service of particular interest in these days of the H. C. of L. is its comparatively low cost. When mail was first carried by air the postage was six cents an ounce. When it was discovered, however, that the cost of the service did not exceed eighty-four cents a mile, the air-mail rate was reduced to the ordinary postage rate. It is asserted by airplane manufacturers, aerial navigation companies, and others interested that flying-machines can transport passengers and small freight more cheaply than any other vehicle and save time doing it, provided they are given sufficient patronage. Aside from mail transportation, the airplane is also being increasingly used for commercial purposes. There are said to be one hundred and fifty machines in commercial use in California and fifty more in Oregon and Washington. About one hundred and fifty are flying in Texas, where contracts have recently been let for aircraft for transporting supplies between cities and the oil-fields. A ten-passenger airplane service is in operation between San Francisco and Los Angeles, and a seaplane-express line between Seattle and points in British Columbia will soon begin operation. The development of commercial flying is being particularly promoted by the Manufacturers' Aircraft Association, which came into being in 1917. During the war this organization devoted itself to coordinating the efforts of its members in supplying the Government with aircraft for military purposes. At present it is principally engaged in fostering and increasing all American companies in an effort to bring them to a productive basis. The work in which this Association is now engaged is thus set out by a writer in *The Sun and New York Herald:*



ROUTES LAID OUT "AS THE CROW FLIES"

In addition to the air-lanes shown here, Army fliers are just completing the survey of a line running from New York to Nome, Alaska, by way of Pennsylvania, Michigan, North Dakota, and Canada.

1. Educating the public in values of aircraft, inclusive of lighter- and heavier-than-air craft, with measurements, motor efficiency, etc., and doing this by demonstrations of their speeds, by eliminating all "stunt" flying, and flying in which enters an unnecessary element of danger, such as night flying or flying over terrane where there is no landing-field.

2. Working in connection with the Department of the Interior, Army, Navy, and Post-office Departments, State governments, municipalities, chambers of commerce, boards of trade, flying clubs (which number nearly one hundred), for the passage of laws for travel in the air.

3. Landing-places. The public, individuals, and municipalities have followed up the visits of airplanes by establishing in many instances the landing facilities which the presence of the machines proved to them were necessary. When the United States Air Service started out on its thousand miles mapping tour it made its own fields, and this boldness stimulated the interest which was necessary for their establishment. As flying grows there must be no lack of vigorous and comprehensive action which will give the planes air harbors. In the establishment of these landing-fields every one can help.

4. Experimenting with strictly commercial planes. This aircraft may be either light two-passenger boats or large boats capable of carrying from ten to a score of passengers. The safety of either depends on the motor, and with this experiment is apt to go on indefinitely. At present the motors in favor are the Liberty, Wright-Hispano, Curtiss, Packard, Hall-Scott, Gallaudet, and Sturtevant. The Hispano-Suiza, which evolved the world-famous *Spad* that proved so wonderfully efficient in driving the German fliers from the air on the Western front of the Great War, is the progenitor of the Wright-Hispano, which is called the American *Spad.*

The underlying idea of the four divisions of work undertaken by the combined aircraft manufacturers is, of course, the demonstration of commercial utility. This covers a wide area: landscape gardening in preliminary and progressive studies, engineering work, studies of local ground and adjacent territories

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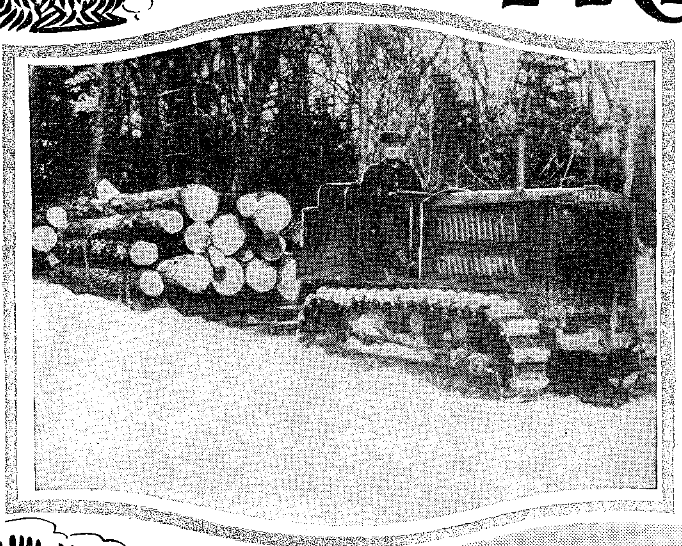
—and the World's Lumber Supply.



OVER frozen rivers, bucking snowdrifts in the Northern woods, on high mountain slopes, in Southern swamps, through the fierce heat of the tropics; *at timber sources on every continent*—"Caterpillar" Tractors are hauling the products of forest and mill, and proving indispensable to modern logging economy.

Dominant in power-farming, road-making, freighting, for over a dozen years; the exclusive choice of U. S. and Allied Governments for military use, "Caterpillar" supremacy is *world-wide.*

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Send for booklet: "Caterpillar" Tractor Performance.

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EXPORT DIVISION—50 CHURCH ST., NEW YORK CABLE ADDRESS—"CATERPILLAR"

MOTORING AND AVIATION

Continued

for factories, etc.; shore lines with studies on the movement of tides and currents in river, harbor, and dock improvement, city planning, mine communications, explorations and reconnaissance of new roads, railroads, trails, etc.; deliveryr outes, forestry surveys, chamber of commerce reports, noting development of sections of cities—these are but a few of the ways that aircraft used commercially would be able to lend a pushing hand.

To the public, however, the interest in the new craft still lies in its adaptability to transportation. It is believed by those in the industry that the present congestion of traffic of all kinds, with no sign of relief by exhausted methods, points inevitably to the abundant use of aircraft. They have had the courage of their belief, for most of them, while waiting to see what Congress would do, devoted a small space in their factories to machines built for commerce, planes in which they expect the public to ride.

These new public carriers are not like the military design built for extreme speed and great maneuverability necessary in aerial conflict, but are planes, instead, of inherent stability, wider cruising range, more economic of fuel, and providing better accommodations for passengers and freight. In brief, the commercial air-carrier is meant to be a machine with thrill and danger eliminated, but just as comfortable and even as luxurious as the modern limousine.

It seems that the postal department of the United States has fully made up its mind as to the commercial possibilities of the airplane. We are told it has asked for bids for carrying the mails by air- or sea-plane on all its 2,500 mail-routes. Among other things, the department has laid down a set of rules governing the service it expects of its airmen and has fixt penalties as follows for failure to perform such service properly:

> No compensation will be allowed for trips not performed. For each such failure in a month over fifteen per cent. of the scheduled trips for the month, twice the pay for the non-performed trip may be deducted. However, pro-rata pay will be allowed for the air-line distance between stated stations on a route traversed in a partially completed trip, provided that the mail reaches the post-office or post-offices for which it is destined not later than it would have arrived had it remained on the train. For each trip in excess of ten per cent. of the scheduled trips in a month on which the mail is delayed beyond the time it would have arrived had it remained on the train, twice the pro-rata pay of the uncompleted portion of the trip may be deducted.
>
> The carrier will be expected to arrive within scheduled time, and deductions may be made from the contractor's pay for failure to arrive and deliver the mail in time for scheduled carrier deliveries; or for failure to arrive in time to connect scheduled mail-trains in accordance with the advertised schedule, when such failures are due to late departures from landing-fields, for other reasons than late delivery of mail to contractor, or to lack of diligence in resuming the trip after a forced landing between regularly established landing-fields.
>
> The Postmaster-General may order an increase of service in distance or in weight of mail to be transported with the consent of the contractor, by allowing therefor not to exceed a pro-rata increase on the contract pay for the mileage or weight involved, provided that such pro-rata cost does not exceed the cost of carrying the mails by train.

How the country would have jeered if such specifications had been printed a half-score years ago! There were some jeers when the Postmaster-General asked for aerial service bids, and yet the greatest feature of the post-office's year was the operation of the aerial mail. It proved that it was practicable. The total mileage on the Washington-New York and the New York-Chicago routes, ending December 21, 1919, was 405,563 miles. The present daily mileage is 1,906 and the total average daily weight of letters carried is 2,100 pounds. For the fiscal year ending June, 1919, the New York-Washington service had cost $137,900.06, and the receipts from the sale of stamps for the mail carried was $159,700. This service represented 128,037 miles and 7,720,840 letters carried. The record of performance was 92 per cent.

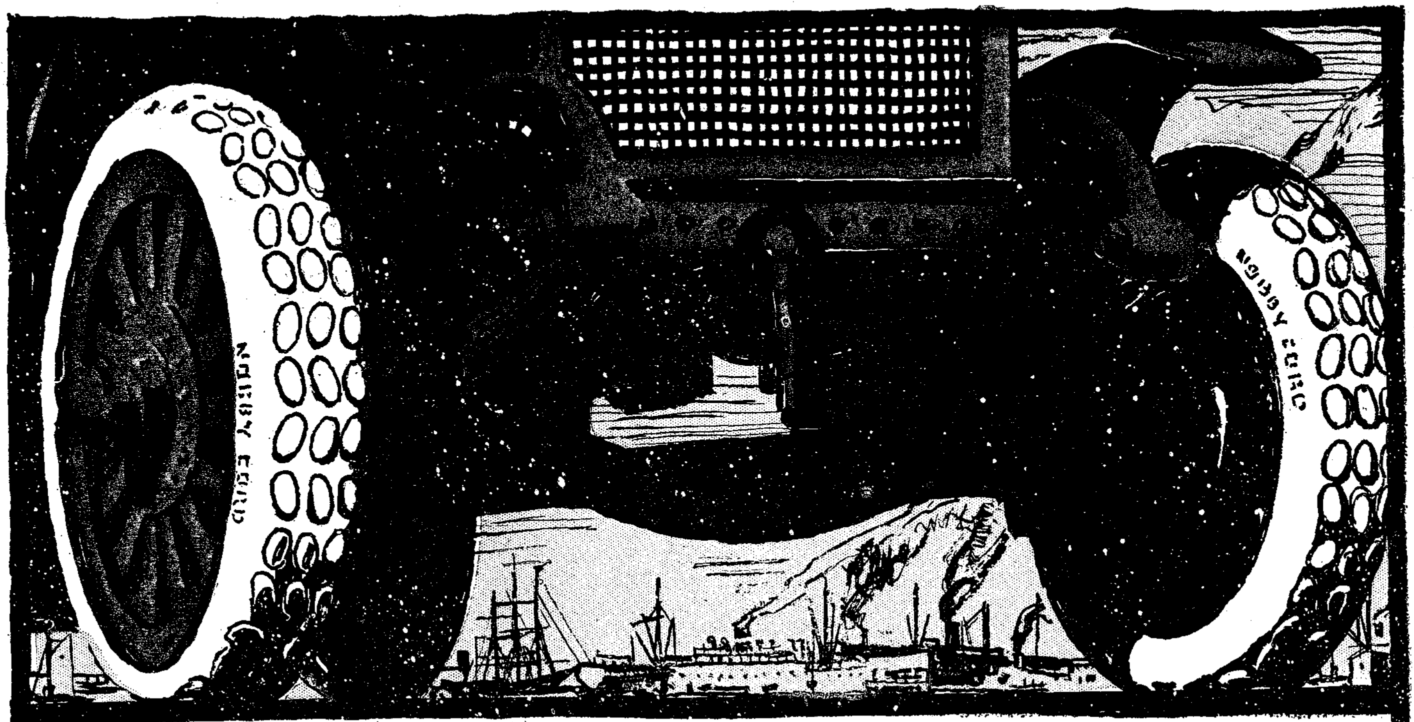
ALL AVIATORS SAID TO BE TRESPASSERS OF THE AIR

THE aviator is in a peculiar situation from a legal standpoint. As soon as he "takes off" from his own field he becomes a trespasser, and, if the neighbors wished to assert their immemorial rights, he could be haled into court for unwarranted invasion. *The Aircraft Journal* (New York) summarizes an article by Percival E. Jackson, in the Pittsburg *Leader*, which calls attention to two sound, fundamental, legal principles:

> 1. The law of the land has been, as far back as the English common law can be traced, that a man owns his land from the center of the earth to the uppermost regions of the sky.
>
> 2. The ancient action of trespass will lie whenever one breaks into the close of another; a mere passing of the boundaries that define one's person or one's property is a trespass that gives rise to a cause of action.
>
> The first premise finds ample support in our present-day decisions. On the theory that an owner's dominion extends to the nethermost recesses of the earth, the passing of one's boundary-line below the surface is held to constitute a trespass. So it is in the case of tunneling under another's land, or of diverting subterranean streams, or of attempting to take minerals from the land of a neighbor; each of these is an actionable trespass.
>
> And the air overhead is not barren of defense, as witness the ordinary predicament that the telegraph and telephone companies find themselves in. They can not put a telegraph-pole on each side of a man's farm and string a wire across without his consent, for they thus invade his dominions above the ground and give him cause for legal redress. So we may proceed upon the basic theory that the premises stated find support in our modern precedents.
>
> Now, then, what is the situation of an airplane in flight? It invades the sacred precincts above the ground heretofore inviolable. It passes through the close of the farmer when it passes above that portion of the earth's surface which the law has always deemed his. The aviator becomes a trespasser. Being a trespasser, the strange and unusual noises of his engine which disconcert and frighten the peaceful hinds and herds below constitute a battery upon them, for while the commonest form of battery is that which usually accompanies assault, still the placing of one in actual fear of bodily harm, unaccompanied by an actual assault, has always been deemed a battery by the common law.
>
> Thus far we find the aviator guilty of trespass and a battery. A continuation of these violent noises which interrupt the somnolent tranquillity of the rustic on the ground serves to aggravate the damage. A constant repetition of this aerial turmoil day by day that constitutes a daily succession of batteries upon the populace can be nothing more or less than a public nuisance, for so the law defines the structure of a public nuisance. And now the aviator becomes a culprit guilty of maintaining a public nuisance.
>
> What legal results will flow from placing our fliers in this status? Let us assume, as sometimes occurs, that the pilot loses control of his plane. His engine stops, or his control-wires break. He crashes to the ground, striking a barn, or a house, or a person. Is he liable to the injured party? He is, and this answer must obtain without regard as to whether or not the fall was occasioned by any fault of the flier. For, having fallen while in the commission of an act in itself unlawful—in fact, while engaged in the maintenance of a nuisance—the aviator must be held to account for any damage that may ensue. A forced landing made by a pilot after something goes wrong may save his life, but he must compensate the farmer whose budding crop of turnips may be prematurely mashed.

This might be said to be as it should be; but the same result does not obtain with the motorist whose steering-gear breaks and precipitates him into a shop-window. Unless the shop-owner can prove some fault on the part of the motorist the latter can not be held liable. In order to predicate a liability in law, one must prove that a resultant wrong is due to some negligence or to some cause which could have been avoided. But with the aviator it is different, even tho the fault is not his. Unlike the motorist, he was engaged in an unlawful occupation. This view has been upheld in actual practise, for—

> The Government has paid thousands of claims for damages resulting from forced landings and crashes. In a great many cases the fault was nobody's, due only to the immaturity of the science. Yet the Government recognized its liability. No fault existing, there could have been no liability, except for the fact that the aviators were engaged in doing something unlawful. And, by a process of elimination, we can only conclude that they must have been committing trespass when the accidents occurred.
>
> So, in theory and in actual practise, we are compelled to the conclusion that, in the present state of our law, the aviator is a lawbreaker. To what harmful lengths this line of reasoning must bring us depends only upon our estimate of the importance to future civilization of the science of aviation. If the flier be a trespasser, then should he threaten to repeat his offense, the landowner may well resort to the courts for an



WHO PAYS FOR PNEUMATIC TRUCK TIRE EXPERIMENTS

WHEN an automobile owner's tire goes back on him he more or less cheerfully charges it off as a personal loss and tries to do better next time.

It is different with the motor truck owner.

Every tire must do exactly what is expected of it or be charged against *his business.*

* * *

Experimenting with tires is not the job of the truck owner.

The United States Rubber Company spent *two years* in developing the idea of putting a heavy truck on air before it brought out the *first pneumatic truck tires.*

Even then it was not satisfied.

Even at that time it saw that you could not take an ordinary passenger car tire, enlarge it and make it do what truck owners expect of their tires.

It went back again to *first principles*—to the foundation—to the *bead* of the tire.

It created a *new type* of bead construction, *positively* anchoring the cords. It put in the *right number* of breaker strips, stronger side walls, a heavier tread.

The result was a pneumatic *truck* tire — not an enlarged passenger car tire. Created to fill a need—not padded and bolstered up to fill a market already created.

* * *

There are still some sizes of U. S. Nobby Cord Tires you cannot buy. The market is there, waiting for them.

But they will not be released until this company is satisfied that they will *do what truck owners expect of them.*

The United States Rubber Company has never asked truck owners to pay for its tire experiments.

U.S. Pneumatic Truck Tires

United States Rubber Company

Fifty-three Factories

The oldest and largest Rubber Organization in the World

Two hundred and Thirty-five Branches

MOTORING AND AVIATION
Continued

injunction to prevent further infringement upon his rights.

The freeholder has no adequate remedy at law, and a court of equity should grant him relief by injunction. The operation of flying-fields could be restrained at the insistence of adjoining landowners. The operation of aircraft over one's property could be restrained in like manner. The result must be the barring of airplanes from all but wild and uninhabited parts of the country. Abroad, in the larger countries, this could mean nothing but an absolute bar against flying.

But, of course, the situation is not as bad as would at first blush seem. There is no universal law that vests ownership in the sky to the mundane freeholder below. His possessory right is defined by the substantive law, by the common law only. The common law is a wonderful, mutable system, that finds its chief virtue in its elasticity. It bends and conforms to and with the expanding spirit of progress, and its bands are of purest Para, to be stretched and distended by the provident hands of courts. The latter, in turn, lay great stress upon the doctrines of public policy and public expediency.

In a word, when the occasion demands, as it does in this situation to-day, the courts can say that the expediency of the present-day demands that the ownership of the air lies in the people, not in the individual, and that the ancient doctrines and the former precedents no longer control. Then comes the turn of the various State assemblies to function; and by statutory regulation to control and regulate the operation of aerial vehicles, the laying-out of air-lanes, and the determination of proper rules of the air, the science of aviation will find in the law support and guidance.

"THE FOOLS WHO HAVE DRIVEN ME," BY AN AGED "SIX"

When a battered old car is towed down the street to an automobile hospital it may occur to a thoughtful passer-by that she might have lived a longer and more useful life had she been properly brought up after she left her birthplace in the factory, a beautiful young thing in her fresh coat of paint. Then her motors sang for the very joy of living. Grace lay in every curve of her body, and her trimmings, like a bird's plumage, shone resplendent in the afternoon sun. Now she is old before her time. Her cylinders are wheezing out her last gasp. When she reaches the hospital she will be beyond need of repair, and after the autopsy denim-coated orderlies will cast her remains on a lot of other old junk. Had her late owners always fed her on the required amount of oil, water, and gasoline and taken tender care of her internal organs when they began first to show signs of what may pass for sclerosis or digestive impairment, she would be still skimming over country roads and through rustic lanes, a little slow perhaps, but still sturdy enough to carry the family home.

"My first driver, of course, drove me when I was so new that my paint glistened; my muffler, being all unstopt up, purred sweetly, and my gears, not being worn in, hummed more than he found pleasant. He was a very new driver, indeed . . . in fact, judging by the way he handled me, he had had about three lessons from an incompetent driver's assistant janitor." It was an old car speaking. She was awaiting her latest purchaser in a second-hand motor mart, says C. H. Claudy in *Motor Life* (New York). Her story is distressing. Speaking still of her first driver, she says:

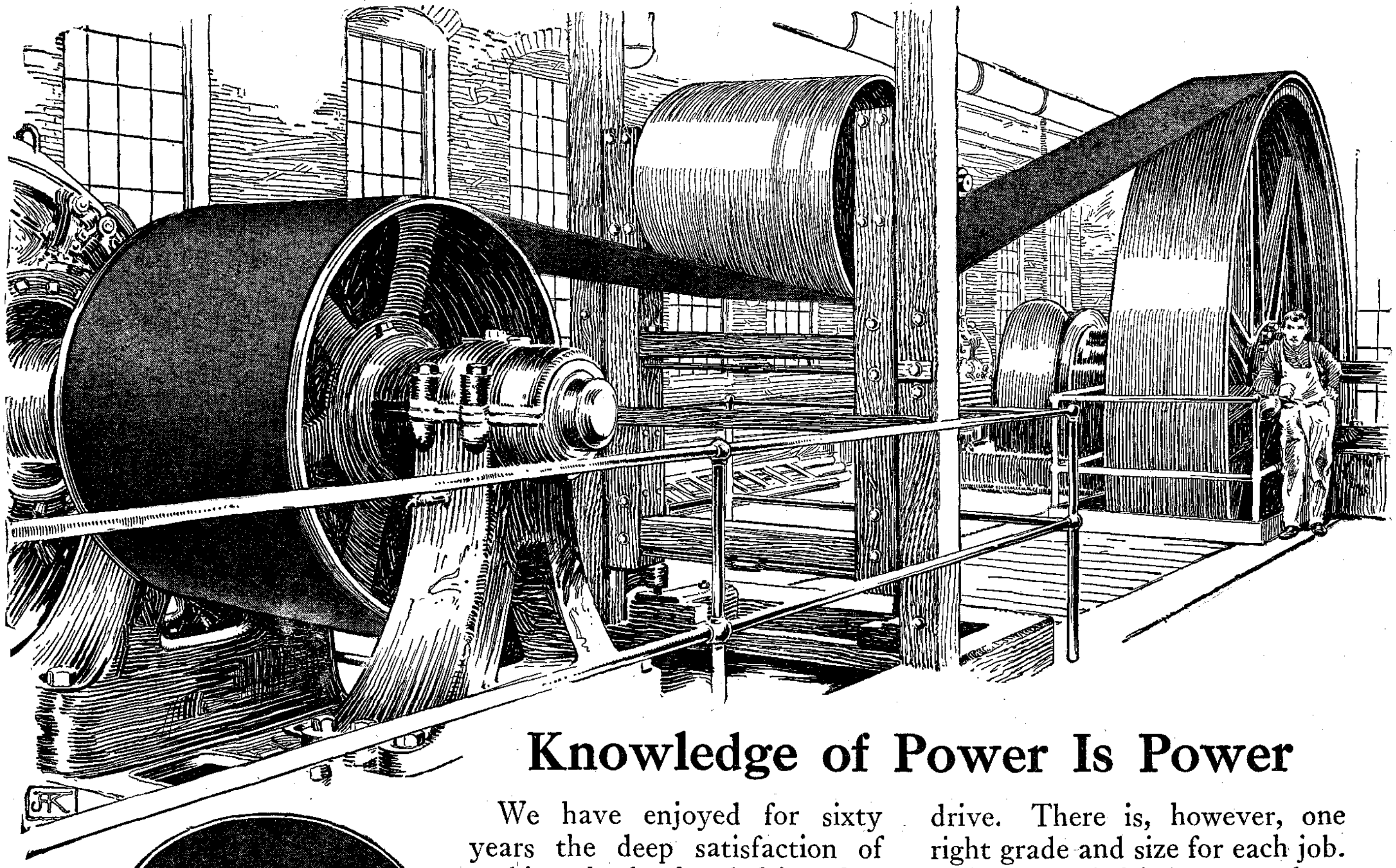
> "He was a very foolish driver, indeed. He drove me thirty-five miles an hour for over two hours the first afternoon he had me out of the shop, and as a result I had to go to the shop for scored cylinders before I was six months old. But I have always found in my long, long life (I am nearly four years old, you know) that the really foolish driver is not so much the man who doesn't know how to take care of a new car as the one who thinks a car, because it is made of steel, can not possibly have any wear connected with it which an oil can won't cure.
>
> "It was my first driver who was obsessed with the idea that he owned the middle of the road. I overheard him tell a Jane he had driving with him one day that it was very injurious to cars to drive them on the right side of a well-crowned road because it threw so much strain on the roller-bearings of the two right wheels. Therefore, he insisted upon driving in the middle of the road, regardless of the traffic which was coming from behind or that which came toward him. When he swung over to the side it was grudgingly and as little as possible and when he came back again it was with a sudden turn and a yank of the steering wheel which made an ache in every spindle and caused my worn gears to pain me muchly. Then when he drove me carelessly, into a curb one day and I refused to stand for it and allowed my right front wheel to buckle up under him and let him down bang and (having your front axle bent is only a little less painful than having it straightened out again) he called me names and said my wheels were made of green wood, when it was his head which was so constructed.
>
> "It was my first driver, too, who had the big idea that the way to go around a corner was to step on my tail and make me jump around. Apparently he had no knowledge of the fact that a differential is made to permit unequal revolutions of rear wheels, and thought it was for the purpose of driving fast about curves. Of course, it wasn't long before I began to protest at this sort of treatment . . . a car is only a motor, after all, and its motor likes to squeak and wobble when it is not treated fairly. So, as he persisted in putting unfair strains on my differential I did my best to get even with him, and soon my rear end was talking so loud he couldn't murmur to shell pink ears next to him on the driver's seat, but had to shout.
>
> "So in the end he got rid of me. I brought a perfectly disgraceful price and I was turned over to the tender mercies of a motor-crank."

Her second driver was an old fogy to whom a set of rules was of almost divine authority. The laws of the Medes and Persians might have been busted, but never one of these rules. Let her tell it:

> "He started the engine, gave it eleven seconds to warm up, measured carefully with his eye and insisted that he must get from first to second in twenty feet, kept an eye on the speedometer and never shifted to high until I showed exactly nine miles an hour (and my best shifting gait is seven), and once he was in high, he wouldn't drop back into second on any grade less than ten per cent., according to a gradiometer he had on the dash. Thus, quite regardless of what speed I might be making or what load I might be carrying.
>
> "And as for the carbureter. Oh, my poor gasoline tank and vacuum system, but how he did love to play with the carbureter. No lover ever liked to let his fingers amuse themselves with his fair one's tresses more than my driver liked to monkey with my carbureter. Why, I once knew him to refuse a drink while he got out and cut down my gas supply—you know he was loony on the subject. He also had a cranky idea that carbureters should be adjusted with spark in normal running position, instead of retarded, as he preferred to make adjustments with gasoline rather than with air, with the natural result that I was forever fouling plugs, and consequently was forever being taken down to have a loose ring I didn't possess hunted for.

Then came a woman, who thought that an automobile should be able to take care of itself, and that it should be able to run the short distance home from wherever she was even if it ran out of water, oil, and gas. She generally wondered what the matter was when the poor old car came to a determined halt, and ended up by calling on an errant motor knight for assistance, or "just enough gas to get home, please." One day the car bounced to a sudden stop, and the lady went to a hospital. The tearful old car continues:

> "Well, it was the end of me as far as she was concerned, and I didn't care at all. I was a frightful mess and they took me to the hospital and got after me with a wrecking crew and wrenches, and I was entirely taken down and hammered and heated and rebored and rebearinged, and I must say I rather enjoyed it, because all the mechanics knew exactly what the trouble was and that it wasn't my fault at all.
>
> "However, all good times come to an end some day. I was given a new long, rakish body, had some near-disks put outside my perfectly respectable wooden wheels, was painted a bright red, and sold to a vivid young man to do duty as a 'sport car.'
>
> "He was a 'sport driver,' this young fellow, much given to checked trousers and red ties and girls with loose hairpins. Also he was given to the possession and the frequent use of a large bottle under the seat, which improved his temper but did strange things to his driving. It also did strange things to me, because when he had filled his tank from the bottle, I could have talked motorese to him in even flivver language and he wouldn't have understood a word I was saying.
>
> "He didn't exactly abuse me—he knew how to drive. But he insisted on taking every hill on high if it had to be at fifty miles an hour, and his favorite recreation was to get some red-haired chorus lady beside him and see how close he could come to taking off wheels of passing vehicles on lonely roads. It was just after one of these flirtations with sudden demise



37½" Heart Double, main drive belt of the Acme Harvesting Machinery Co., Peoria, Illinois. Transmitting 350 to 450 horsepower. Heart Double made from strictly first quality center stock oak tanned leather is recommended for use on main drives or other installations where power requirements are heavy and pulleys large in diameter (18" and over).

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Knowledge of Power Is Power

We have enjoyed for sixty years the deep satisfaction of making the leather belting that drives the wheels of thousands of leading industrial plants. Our pride in our product is justified by the product's widespread use.

More recently, by long, costly, and intensive investigations, our belting engineers have reduced leather belting power transmission to an exact science. We feel it our privilege to give the results of our work to belt users in general without any obligation on their part in return.

Because ordinary leakage in power transmission is detected only by scientific tests, many grades and sizes of belting often give what is looked upon as a satisfactory result for a specific drive. There is, however, one right grade and size for each job. Only expert belting men such as are trained in the Graton & Knight laboratories can be depended upon to select the one right belt.

By standardizing Graton & Knight brands of leather belting both in their manufacture and in their application, we are able to put *the one* proper belt on every class of drive.

The Graton & Knight Standardized Series of Leather Belting contains a belt for every need. Given the transmission problem, a belting expert can select the right belt on the basis of the work to be done.

We invite you to call upon our belting experts without obligation to yourself.

Write for our book, "Standardized Leather Belting"

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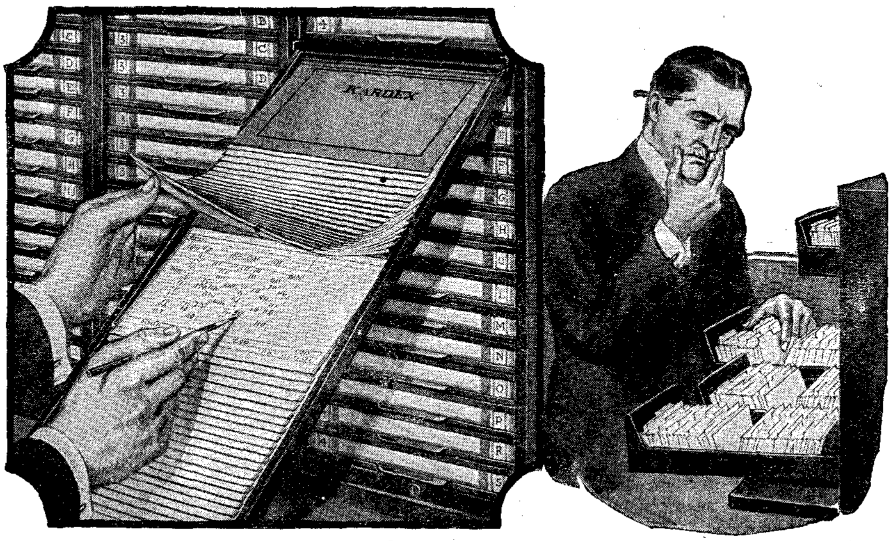

Looking ~~for~~ at it!

YOU look *FOR* cards when they're hidden away one behind the other in card drawers, and sometimes you look for them a long time when they're mis-filed. You fumble over a dozen cards to find one.

But you look *AT* records in Kardex. The name or title is always in plain sight. A glance locates the card you want—a flip of the finger shows you the required data. You make entry or get data from either side of the card without removing it. That means no possibility for mis-filed or lost cards.

The speed and ease of locating cards in Kardex saves 50% to 75% of time. Instant accessibility of Kardex records *encourages* their use in planning and deciding. No guess work, no oversight.

Kardex will accommodate your present cards. The change from card drawers to Kardex is easily and quickly made.

It is costly for you to look *FOR* records. Look *AT* them in Kardex. Write for further details.

KARDEX
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AMERICAN KARDEX COMPANY
Main Offices and Factory: Tonawanda, N. Y.

Branch Offices:

ATLANTA
BALTIMORE
BOSTON
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CHICAGO
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LOS ANGELES
MINNEAPOLIS
NEW YORK
PHILADELPHIA
PITTSBURGH
SALT LAKE CITY
SAN FRANCISCO
SEATTLE
ST. LOUIS
SYRACUSE
WASHINGTON, D. C.
TORONTO, CAN.
LONDON, ENG.

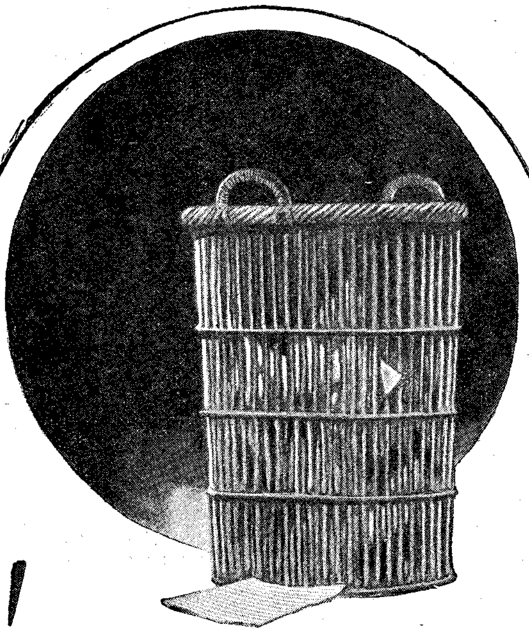
MOTORING AND AVIATION
Continued

that I felt it—the most awful sensation a car can have—one of my steering knuckles cracked. I can't explain it, but when a car knows that something is wrong with her steering it's like having the very heart torn out of one. Of course, I did everything I could to attract his attention. I steered as hard as I could and as crankily as I could, and wherever I could produce a squeak or a rattle or a noise of any sort I made it. But he was one of those one-arm experts and he had no attention to pay to me just then—and so, and so—

"Well, they picked the two of them out of a field a hundred feet away and sent them to the shop for new bodies, bumpers, and power-plants, and me they dug out of a ditch with a chain-hoist, a wrecking crew, and much evil language. Of course I knew it wasn't my fault—people who drive forever without paying any attention to their steering-gear are likely to get it in the differential that way. But the wrecking crew didn't think I was much good, and so after I had gone through the shop again I was rebodied and repainted and—honestly, I don't see why a car should be ashamed of poverty, do you? I earned a perfectly honest living and I did it as well as some who are born to it. Of course, it is a terrible come-down in the world, I admit that. For a well-born, expensive, high-powered six-cylinder car to become a common taxi-cab is not an enviable fate!

"However, as I speedily found out, it is not being poor and earning an honest living which is most damaging to a high-priced six, but being in the hands of a man who has monthly impulses to go and be something else than a taxi-driver. Whenever one of these changing fits struck my driver he became extremely reckless as to what happened to me. As a taxi-driver depends upon the tips of his patrons for part of his living, he is apt to try to please said patrons regardless of his car. And when a chap tells him to get to the station in eleven minutes and he'll give him a dollar tip, why, he makes it, and wo unto anything which stands in the way. Wo, also, unto the taxi if anything does stand in the way, which is why I had the rear end of an army truck inserted through my radiator, my driver went to the police station, my fare to the hospital instead of the train, and me to a repair-shop where I was made over again for the fifth or eleventh time.

"My next experience I shall always remember with pleasure because, while I was treated outrageously from a car's standpoint, it was from ignorance and not viciousness. I was bought for a few hundred dollars (it is not necessary to enter into too minute particulars as to the amount; I still have some pride left) by a farmer who wanted to put a truck body on me and use me to haul milk and vegetables to market. Some one had told him that a car needed gas, oil, and water, and I had them as religiously as his horses got oats and hay. But no one had told him that tires needed air, that a wash gives any car a self-respecting feeling as well as appearances, or that a car has a distinct tone of voice to warn her driver when a piston slaps, a wrist-pin is loose, a main bearing is worn, or a tooth in a gear broken. The result was that in a few months I was one large motor sore. My broken tooth, long since ground to small pieces, was rapidly eating all the edges off the rest of my



"Gosh!
I hate to throw
that fellow's booklet away"

AS the rain falls alike on the just and the unjust, so does the beautiful booklet as well as the poor, ugly one sooner or later go to the waste-paper baler.

There is no use in perpetuating the silly myth that poorly printed catalogs are chucked into the waste basket and well printed ones cherished forever.

The distinction is much finer than that. There is the good-looking booklet that you just hate to throw away—and don't for several hours or weeks. Even before you do get rid of it, you feel in duty bound to read it.

And sometimes a very poorly printed booklet or catalog is so sensibly written that it is saved in spite of its unattractiveness.

The difference between printing done on Warren's Standard Printing Papers and other printing is not conspicuously apparent. Generally the results are:

A little time saved in the pressroom owing to the easier handling of the standard quality paper, and a little expense saved for the same reason

A better reproduction of prized drawings and photographs

A little more legibility of type

A little better folding and binding "performance"

And, as mentioned above, a little longer average life before being laid aside or thrown away.

Always some of these things, sometimes all of these things, you get when you use a Warren Standard Printing Paper. About the only advantage you lose is the doubtful one of driving a sharp bargain with a printer whose help and co-operation can be of value to you.

Examples of the kind of printing any good printer or any buyer of printing may legitimately expect if a Warren Standard Printing Paper is used may be secured by writing us, or by consulting Warren's Paper Buyer's Guide, or the Warren Service Library. These books can be seen in all the public libraries of our larger cities. They are also in the offices of catalog printers and the merchants who sell Warren's Standard Printing Papers.

better
paper
better
printing

S. D. WARREN COMPANY, BOSTON, MASS.

Warren's
STANDARD
Printing Papers

MOTORING AND AVIATION
Continued

gears, and the only difference between the noises I made when running to market and the noises of a threshing-machine with loose chains was that my noise traveled only along the road.

"Of course, my work was easy enough. Fifteen miles an hour is nothing to a well-born six, even an abused one, and my loads were light and my hours of work short. But altho I did my best to last and receive the kind treatment I was always accorded, with the exceptions noted, my disintegrated mechanism, my spavined gears, and my worn bearings at last proved my undoing.

"I was sold, this time for a consideration I shall not even mention, and my former owner bought a second-hand flivver by adding something to the nearly insignificant price he received for me.

"I am now out of the shop again. I have been painted once more, a new top put on me, I am advertised as 'mechanically perfect,' and I look to be what I am not—a first-class car. I know my end as well as if it had already happened—I have no hopes left. Once, perhaps twice more, I shall drift through the hands of owners who will not care much what happens to me because I am 'only an old car, anyway.' And then, some day, when I have another smash-up, I shall be towed to a junk dealer who will take me to pieces and sell what parts of me are in decent condition to owners of my model who are in need."

WATCH YOUR WOBBLING WHEELS, AND SAVE YOUR TIRES

EVERY automobile-owner is interested in tire-saving, and if he pay heed to a few timely suggestions he may not only save much wear and tear on his tires, but also decrease his calls on dealers and limit the outpourings of his pocketbook. For instance, if the wheels begin to wobble, it is not always a sign that the driver has evaded observance of the Eighteenth Amendment. It is more probable that the wheels are out of alinement, and if this continues long the sidewise friction on the tire will very soon put it literally out of the running. Many a man goes to needless expense by failing to keep an eye on his wheels, for perfect alinement is a first essential. The wheels are made to run parallel, and when they proceed to bend their efforts away from each other the tire suffers from the extra rubbing and the owner's pocketbook loses a bit of its bulge. In the Motor Department of *Leslie's Weekly*, conducted by H. W. Slauson, M. E., we learn that—

> Nothing will grind the tread rubber from a tire as quickly as the rasping action of a wheel out of line. The heaviest treaded tire will, if the wheels are sufficiently out of alinement, be worn down to the breaker strip in less than five miles. And strangely enough, in such case, it is extremely difficult to convince the car-owner that the abnormal wear is not due to the softness of the rubber.
>
> Let us for a moment consider the reason why a side-swiping or oblique motion has a better cutting or wearing action. Take, for instance, a razor. In shaving a man does not draw the blade straight down against the beard. Instead he draws the razor downward and obliquely. Barbers tell us that this is proper because the edge of the razor, when viewed under a microscope, resembles the edge of a saw. Then again the mechanic in filing a bit of metal finds that the cross motion with the rasp attains the result more speedily than were he to file in a straight line. Hence, a cross motion on the surface of a tire while it is speeding forward can not help but literally grind the rubber from the carcass.
>
> When a wheel is out of alinement the fact can be very easily determined before the tire has been completely ruined. The tread will wear off flat as tho stript off with a knife, whereas in normal wear there is a slight curve in the tread, altho it may already have run a considerable distance. However, it is obviously quite important that such a condition be remedied immediately, else the tire is prematurely consigned to the junk-heap. It is undoubtedly a fact that at this very minute there are thousands of cars throughout the country whose wheels are out of true and whose owners are unaware of the fact. These men are certainly not getting the service they should from their tires.
>
> As probably every one knows, the front wheels of an automobile "toe-in." This is done because under the driving force the front wheels have a tendency to spread; hence, the "toe-in" was devised to offset this tendency. Usually the "toe-in" allowance is from three-sixteenths to one-quarter of an inch for each wheel.

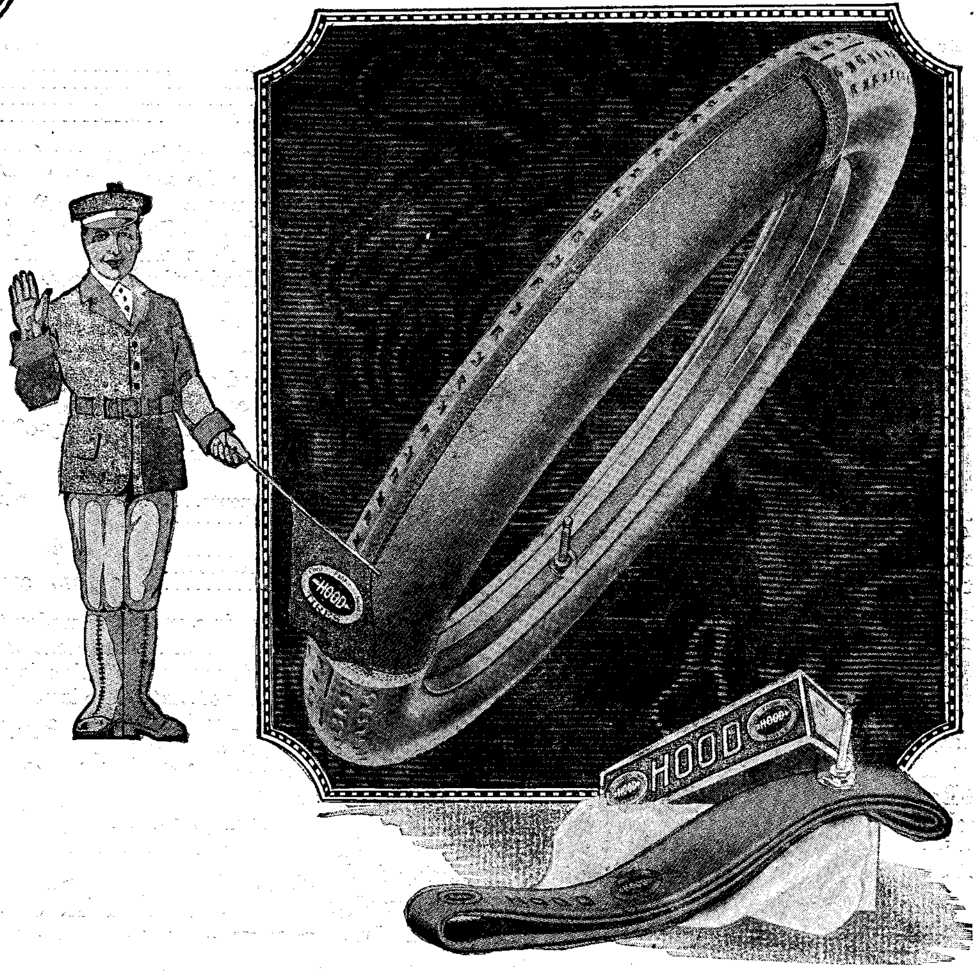
If it be found that the front wheels toe outward, it is evident that something is wrong. If no accident has occurred, it may be that the connecting rod to the steering knuckle is too short. This defect can easily be remedied by lengthening the rod until the fault is corrected. It is wise to check up the alinement of the wheels from time to time. In doing this it is necessary to get the exact measurement between the wood felloes, holding the measuring stick inside the wheel and directly in front of the axle. Then take the measurement back of the axle. The difference between the two measurements should not be greater than from three-eighths to a half-inch. If it is found that the space between the wheels is greater, it is evident that the wheels are not in alinement and the fault should be rectified at once. Further:

> It will also be noted that the front wheels of a car are cambered, or dished. That is, in plain English, the holes are bored in the hubs "on the bias." The object is to bring the points of contact of the tire tread with the road as nearly under the steering-knuckle pivots as possible, the theory being that this position makes for easy steering and the turning of curves. The "dish" allowance varies from about an inch to an inch and three-quarters. This will explain why altho the front tires "toe-in" they wear down evenly rather than one-sided, as one would naturally but erroneously expect to be the case.
>
> It must not be thought, however, that excessive tread wear is always due to wheels out of alinement. Another very grave and common cause is wobbly wheels. A loose or worn hub disk or worn bearings will cause a wheel to wobble or have more play than is necessary. This sets up a wavering or twisting motion as the wheel rolls over the ground, and with each twist of the wheel a part of the tread surface of the tire is scruffed off.
>
> In some makes of tires it is very easy to determine the fact that the wheel is wobbly. The surface of the tread, instead of wearing down smoothly, wears down unevenly or in little hills and valleys. Some users are prone to condemn such a tire as defective. It would hardly be possible for every other inch of rubber on the surface to be imperfectly made while the intervening space is perfect.
>
> Wheels that wobble are found mostly on small cars, altho this does not mean that the larger cars are entirely free from this evil. A wobbling or wavering wheel will wear out a tire in less than one-third the time it takes to wear it out in normal wear.
>
> The rear wheels of a car are not as likely to become wobbly as those in front, and by the same token they are less likely to get out of line. However, when rear wheels get out of line they wear down faster than those in front under similar circumstances, because of the traction strain.
>
> If it is thought that the rear wheels are out of alinement, it is suggested that the car be jacked up and some stationary object, preferably a pencil or a bit of chalk, be held within a fraction of an inch of the rim. Then spin the wheel, and if it is not true part of the rim will strike the chalk and other parts will not.
>
> A wobbly wheel can not always be determined by jacking up the car and spinning the wheel, since the wobble is more apparent when the weight of the car is upon the wheels. The practise of parking cars against curbstones is responsible for a great deal of wobbly and unalined wheels, as the constant banging has a tendency to twist the wheels from dead center.

SOME AIRCRAFT HAZARDS AS SEEN BY THE INSURANCE AGENT

WHEN man began flying in earnest the insurance companies awoke to the fact that here was another business affording possibilities, and now aircraft are being insured against every sort of hazard and covered against loss resulting from damage to person and property. Fires in the air are now infrequent, tho at one time they were the most feared of the dangers which beset the aviator. The fires chiefly considered by the insurance companies are the hangar hazard and fires resulting from collision and ground testing. The "dope" on the wings is very inflammable and it may be that with the more general use of fire-resisting "dope" the fire experience will be somewhat better. *The Business Digest and Investment Weekly* reprints from *The Economic World* various hazards recognized by the insurance companies:

> Depreciation—With good care the fuselage and wings should last two or three years, but the motor depreciates about fifty per cent. in six months, which is the usual policy term.
>
> Collision Hazards—By far the larger number of losses are caused by collision, especially in forced landings, due to engine failure.
>
> Wind-storm Stranding and Sinking Hazard—As a rule written separately from collision insurance. Last year there was a wind-storm at Hempstead, which caused



"Finding a tire that is most profitable"

An investigation carried on as regards cost of operating cars for salesmen brought out the following fact—

"The general tendency at the present time is toward the use of cord tires even though the cost is a little higher."

What is back of this statement? The higher cost is caused not by detail of construction, whether cord or fabric, but because of more and better material as well as better construction.

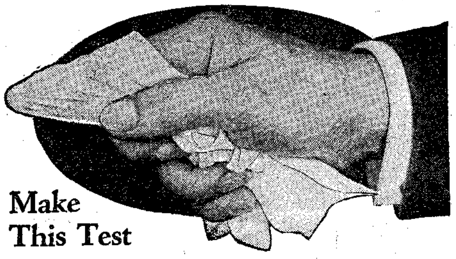
And Hood Tires, whether cord or fabric, have always gained their reputation for trustworthy service because of more and better material properly put together, consequently the tendency among drivers looking for the "most profitable" tire is toward Hoods.

Why not purchase one at the Sign of the Red Man, and see just how much profit they make for ***you?***

HOOD RUBBER PRODUCTS CO., Inc.
Watertown, Mass.

Cord Fabric Solid
HOOD
TIRES

The Sign of a Hood Dealer



Have White Teeth When You Are 40

Make Test Dentists Made

IN 1906 we perfected Drucker's Revelation Tooth Powder and began its demonstration before dentists. We told them that it overcame fermentation and removed from the teeth all discoloring and decay-causing fermentative film.

During the fourteen years since that time thousands of dentists have tested Revelation Tooth Powder and have acknowledged our claims. Last year the sales of Revelation Tooth Powder totaled 1,000,000 cans, though we had never advertised it. The vast number of users had learned of "Revelation" ONLY THROUGH DENTISTS.

It is now possible for you to make the same test that Dentists have made for fourteen years. Judge the results for yourself:

Place a small quantity of Drucker's Revelation Tooth Powder in your hand. Wrap a clean handkerchief or piece of sterile gauze around your finger. Dip this into water and then into the powder, and rub any stain on any tooth. See how easily the stain is removed. Or, brush all your teeth with "Revelation" and see how quickly they are made pearly white.

Fermentation and fermentative film cause nearly all tooth and gum troubles. Such troubles increase in middle age because then fermentation usually is most active. By arresting fermentation and taking off the fermentative film Revelation Tooth Powder keeps your teeth white, sound and free from tartar and decay, makes your gums healthy and consequently a firm protective covering for the sensitive necks of your teeth.

Your druggist now has Drucker's Revelation Tooth Powder or can get it easily from his jobber. Or we will supply you by mail. Regular price 35 cents, with guarantee of satisfaction or money refunded.

Made only by

August E. Drucker Co.
SAN FRANCISCO

BRANCHES
NEW YORK and CHICAGO

MOTORING AND AVIATION
Continued

serious damage to the exposed planes on the field.

Liability and Property Damage Hazards—The risk here is not while the machine is in flight, the possibility of anything falling from it and hitting pedestrians being practically theoretical only. The real risk is in alighting and ascending. Damages to passengers and forced landing on farm lands are other possibilities.

Policy Forms—Until 1919 coverage was granted by applying riders to either the automobile form or the firm form of policy; but in 1919 a special basic form and plan of coverage was prepared by the Merchants' Fire Insurance Corporation.

Rate—It may fairly be said that the present rates are very largely judgment rates. An attempt is now being made to keep statistics on a uniform basis, and when this is done rating can rest squarely on experience.

NEW YORK AUTOS VIE WITH WAR-CREATING CASUALTY-LISTS

AUTOMOBILISTS and drivers of motor-trucks, by reckless driving, carelessness, or unavoidable accident have killed 4,684 men, women, and children in New York State during the last five years. This number about equals the number of New York men killed in action during the war, and is more than twice the number of New-Yorkers who died of wounds. In New York City during the same period 2,524 persons were killed by autos. The following table, as given by a writer in the New York *World*, shows the death list yearly since 1915:

Year	*City*	*State*
1915	335	659
1916	347	729
1917	502	837
1918	638	1,189
1919	702	1,270
Total		4,684

A strenuous fight to clear the streets of reckless drivers has been waged, says the writer, and the effort has won the commendation of the various magistrates sitting in the traffic courts. It is remarked that Chief Magistrate McAdoo has stated that for the past ten years he had urged upon the legislature that the only effective remedy is the suspension and revocation of licenses. Furthermore:

Magistrate W. Bruce Cobb drafted two bills in an effort to curb the appalling conditions. These were blocked of final passage, after they had passed one House, by a well-organized opposition represented by able lawyers always present at the hearings before the committees of the legislature.

The annual report for 1919 shows that the total arraignments in the Manhattan Traffic Court were 26,123. Of this number 7,903 were charged with speeding and 300 for reckless driving. Fifty-nine were arraigned on a charge of felony for leaving the scene of accident, and sixty-seven for operating while intoxicated. The total fines amounted to $282,102.

A total of 1,119 were committed in default of payment of fine, 495 were imprisoned for non-payment of fine, and 449 were committed without the alternation of fine. Thirty-five licenses were revoked; the suspensions were thirty-eight.

The following shows the increase of cases since 1917.

Year	*Arraignments*
1917	11,906
1918	13,900
1919	26,123
1920 (six months)	15,176

The cases this year are far in excess of those for the same period last year.

June was a record month for the Manhattan Traffic Court. Approximately $40,000 in fines was collected. The court handled violations of auto ordinances of various sorts totaling 3,741. Seventy-five convicted autoists were sent to jail for from three to twenty days, 1,159 were convicted as first offenders, 82 as second, and 17 as third.

Following is a summary of the work for three months:

	March	*April*	*May*
Arraignments	2,457	2,405	3,187
Speeding	448	901	903
Reckless driving	15	40	29
Committed	142	202	145
License revoked	1	28	4
Fines	$22,370	$31,481	$34,008

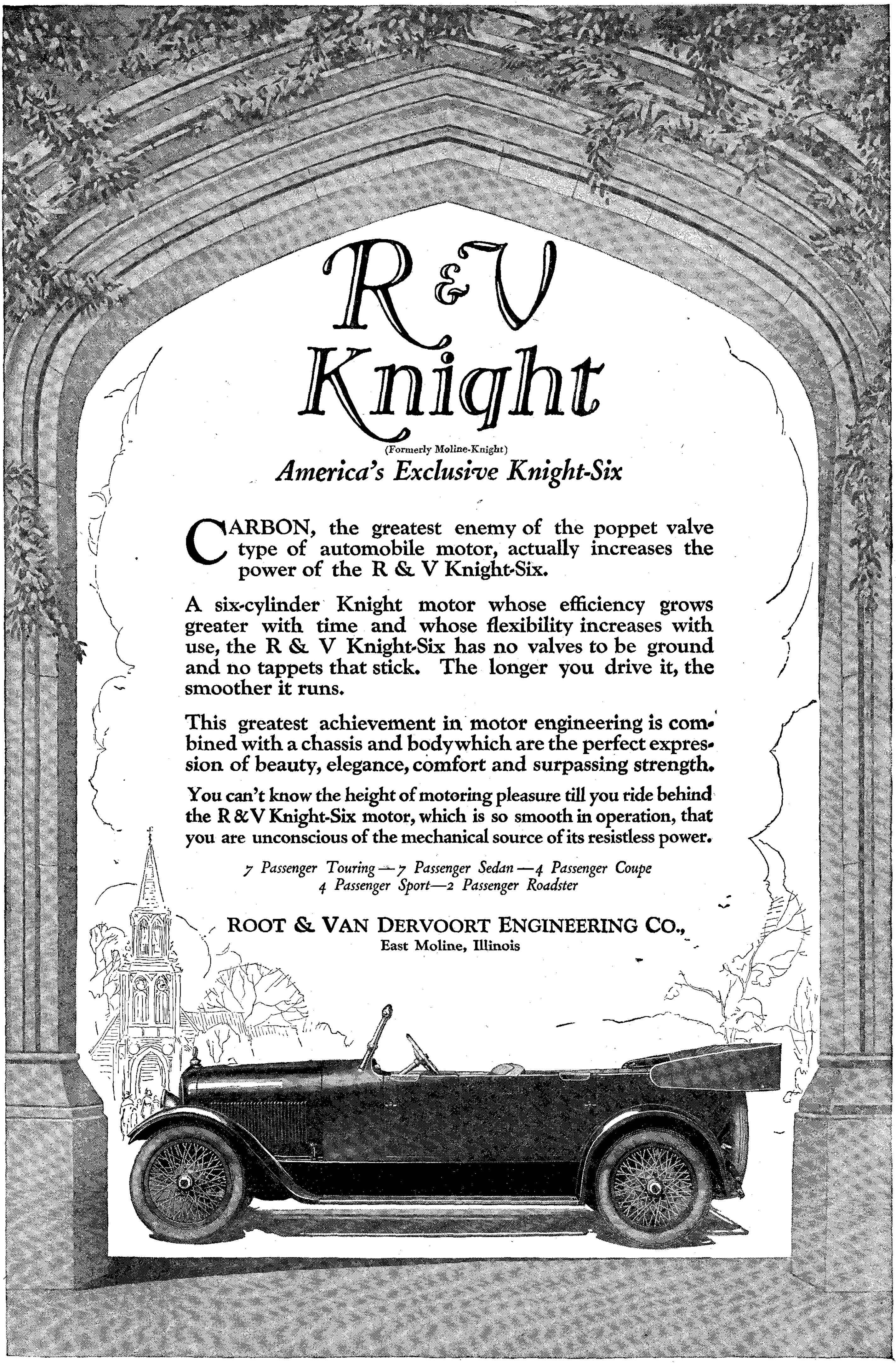
There is a provision under the law now for suspension and revocation of licenses. Under it recommendation is made to the Secretary of State, who is permitted to hold a trial, hearing lawyers and all incidents brought out by prolonged investigation. Many are of the opinion that this power should reside in the magistrates presiding in the traffic courts.

ONE MILLION AMERICAN MOTOR TRUCKS IN USE

SOME pessimist once said that there would never be a million trucks in use in America, says a writer in *The Journal of Commerce* (New York), and announces that a representative of an automobile bureau has stated that there are already practically a million such trucks operating in this country. As an evidence of this statement, a compilation recently made by the B. F. Goodrich Rubber Company, from reports of Secretaries of State and estimates of its own statisticians, shows that there were 953,093 trucks in use at the end of the year 1919, as compared with approximately 700,000 for the preceding year. This is a gain of thirty-seven per cent., sixteen per cent. greater than the increase shown by passenger-cars. Only eighteen States keep separate compilations of truck registration. The following table gives figures by States and the rank of each State in truck-ownership:

State	*Rank*	*Trucks*	*State*	*Rank*	*Trucks*
Alabama	25	10,249	Nevada	48	*700
Arizona	41	*3,200	New Hampshire	40	*3,902
Arkansas	37	*5,600	New Jersey	17	20,000
California	5	*58,700	New Mexico	43	*2,810
Colorado	20	*13,500	New York	1	94,716
Connecticut	18	19,799	North Carolina	29	9,150
Delaware	45	*2,100	North Dakota	46	1,314
Florida	31	3,239	Ohio	3	*64,500
Georgia	28	9,300	Oklahoma	16	*20,100
Idaho	38	*5,600	Oregon	23	*11,300
Illinois	2	*65,000	Pennsylvania	4	*64,200
Indiana	10	*33,000	Rhode Island	33	7,000
Iowa	6	*42,500	South Carolina	27	*94,600
Kansas	12	*27,800	South Dakota	18	*11,205
Kentucky	30	9,105	Tennessee	21	12,000
Louisiana	32	*7,100	Texas	7	*42,250
Maine	36	5,792	Utah	39	*5,300
Maryland	26	10,160	Vermont	44	2,402
Massachusetts	8	42,000	Virginia	22	*11,800
Michigan	9	36,863	Washington	15	*23,600
Minnesota	11	*34,300	West Virginia	34	*6,700
Mississippi	35	*6,350	Wisconsin	24	10,887
Missouri	14	*25,000	Wyoming	42	*2,900
Montana	47	1,200			
Nebraska	13	*27,300			953,093

* Estimated.



R&V Knight

(Formerly Moline-Knight)

America's Exclusive Knight-Six

CARBON, the greatest enemy of the poppet valve type of automobile motor, actually increases the power of the R & V Knight-Six.

A six-cylinder Knight motor whose efficiency grows greater with time and whose flexibility increases with use, the R & V Knight-Six has no valves to be ground and no tappets that stick. The longer you drive it, the smoother it runs.

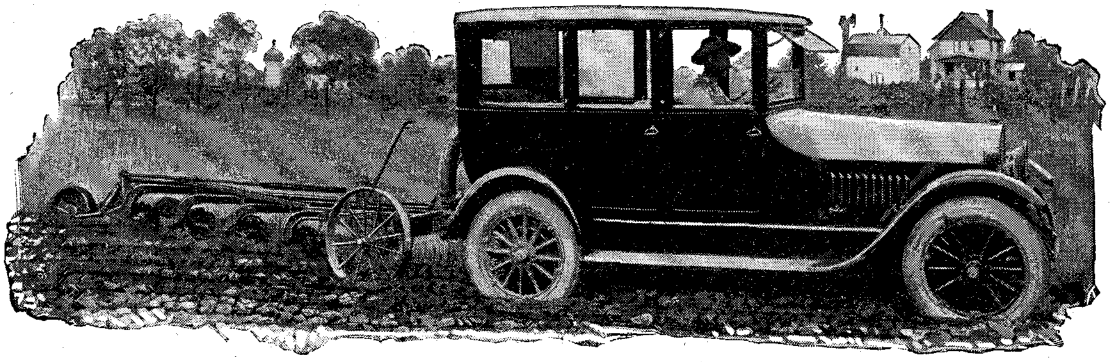
This greatest achievement in motor engineering is combined with a chassis and body which are the perfect expression of beauty, elegance, comfort and surpassing strength.

You can't know the height of motoring pleasure till you ride behind the R & V Knight-Six motor, which is so smooth in operation, that you are unconscious of the mechanical source of its resistless power.

7 Passenger Touring—7 Passenger Sedan—4 Passenger Coupe
4 Passenger Sport—2 Passenger Roadster

ROOT & VAN DERVOORT ENGINEERING CO.,
East Moline, Illinois

LINCOLN ELECTRIC MOTORS



Plowing With A Limousine

MANY plants are applying their electric motors on about the same principle as the city farmer who used his limousine to pull the plow.

They take a machine like a punch press which requires a great surge of power every few seconds and drive it with the same kind of motor which they use on an exhaust fan where the load and speed never vary.

If they could actually see the electric current at work under such conditions they would be astounded at the waste of power and loss of production.

Such losses can be prevented in only one way—by having the electric motor fitted to the machine right in the plant where the machine is made.

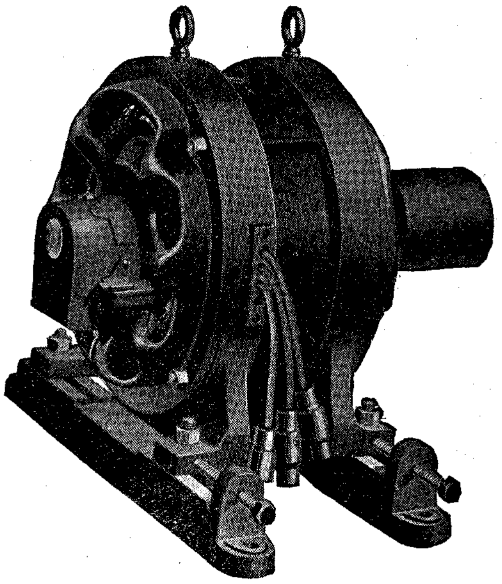
Lincoln Engineers have worked on this plan with the representative firms making different classes of machinery—testing their different models in actual service—selecting motors of the right type and size for each application—standardizing the whole matter of power for these machines.

Many machinery manufacturers invariably furnish their equipment with Lincoln Motors mounted. Any manufacturer will gladly do so when he knows that his customer prefers to have the machine with the power properly fitted to it.

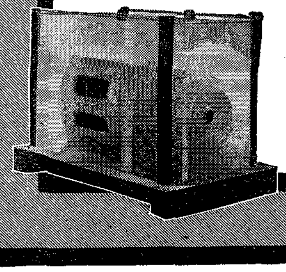
Lincoln Motors are 40 degree motors—their capacity for work is approximately 25% greater than the "50 degree" or "continuous rated" motor.

Also Sold By The Fairbanks Co.

Lincoln Motors are the only motors sold by the 23 branches of The Fairbanks Co. under their famous Fairbanks "OK"



The Lincoln Motor operated under water at exhibitions and conventions for over 3 years without damage to windings.



"Link Up With Lincoln"

Branch Offices:
New York City
Buffalo
Syracuse
Baltimore
Cincinnati
Chicago
Detroit

The Lincoln Electric Company
General Offices and Factory, Cleveland, Ohio
The Lincoln Electric Co., of Canada, Ltd
Toronto-Montreal

Branch Offices
Columbus
Pittsburgh
Philadelphia
Boston
Charlotte, N. C.
Minneapolis
Hartford, Conn.

SCIENCE • AND • INVENTION • CONTINUED

CARELESSNESS

IF being "careless" is simply failing to care whether one thing or another happens, then very few accidents are due to it, concludes D. H. Colcord, who contributes an article on "The Scientific Basis of Carelessness" to *The Scientific American* (New York). A man is injured in an industrial accident, not because he does not care whether he is hurt or not, but because his attention is distracted for the moment. The trouble, Mr. Colcord says, is really caused by skill—not by lack of care. Skill has learned so well how to perform an act that it becomes mechanical; and the lower brain-centers, which govern mechanical movements, are useless in an emergency. The emergency comes; it requires quick thought to handle it, and the brain, tangled up in a chain of habit, fails to respond rapidly enough. This is not properly "carelessness," altho the word is popularly used to cover a host of such cases. The remedy, Mr. Colcord thinks, is occasional change of environment and of occupation, when this becomes too mechanical, so that the higher brain-centers shall have a chance for quick response occasionally. He writes:

"When a man deliberately steps into the street directly in front of a moving automobile and is injured, bystanders assign carelessness as the cause of the accident, whereas the real basis for his apparent lack of judgment may be buried deep in his nervous system. Thousands of accidents of a similar nature which occur every year and appear to be preventable are in reality caused by a physiological condition over which the victim has no control. A nervous reflex located in the muscles often is more powerful in an emergency than man's higher brain-centers, and is at all times a treacherous asset.

"To carelessness is assigned the majority of industrial accidents, which total alarming figures, notwithstanding the advance in the science and art of safety engineering. When is a preventable accident due to carelessness, and, furthermore, when is a man actually careless? With analysis it will be found that the instances are rare when an employee who has been injured or killed has failed to 'care' for his safety—statistics to the contrary notwithstanding.

"Briefly stated, in a careless moment the attention becomes fixt and the judgment suspended because all of the controlled motor activity of the nervous system is held in abeyance during a period while a set chain of habits is running its course. The period may be but an instant of time or it may be several minutes; in any case, of sufficient length for a sleeve to be caught or a punch-press to fasten the hand. The sensory nerves are functioning, messages of warning are flashing to the brain-centers; but reaction is delayed.

"Did you ever start to change your collar before dinner and find that you had, from force of habit, removed several other articles of apparel before your attention was arrested? Have you ever gone to the bathroom for a drink of water to find yourself a moment later with a razor in your hand? You can find any number of instances from these suggestions wherein daily you perform some act deliberately and find yourself in the midst of a second or third act that has by habit accompanied the first. A prominent industrial surgeon told me that occasionally men burned themselves with apparent deliberation, the movement that produced the injury being a unit in a habit-series. A man operating the levers of a crane, pouring a heat, oiling a lathe in motion, driving an automobile, or crossing a crowded thoroughfare, may at a dangerous moment continue to act as accustomed by habit, thus occupying the nervous machinery with habit-chains which prevents conscious control. The more highly skilled a workman becomes the more liable he is to such a lapse of attention accompanied by unconscious activity."

As hinted above, the writer thinks that a correct analysis would charge the responsibility to skill rather than to carelessness. The man has relegated to the lower brain-centers control of the thousands of acts that function in series. The automatic connection between separate acts, altho valuable as skill, may prove to be his undoing in an emergency. To perform one act touches off the series. Animals are not careless—they are always at attention, being unencumbered with automatic complex muscular coordinations. He goes on:

"What is there about the function of our nervous system that creates the serial action or chains of habit? Curiously the organ that furnishes the link in the chain is located in the muscles. It is man's sixth sense. The movement of a muscle stimulates nerve end-organs located beneath muscular tissue. The end-organ here transmits the stimulus to the sensory nerves. The nerves carry it to a nerve-center, which redirects the message, transmitted over the motor nerves to the muscle, and a second act results. The same process may act and react indefinitely until the action is performed. For instance, one sees that a steel cylinder has been cut to the mark on a milling machine—an arm moves to stop the carriage—the movement of the arm muscle stimulates the muscular sense which 'touches off' a leg movement to kick open a switch to stop the motor—the kick sets up a nervous transmission that moves the arms to release the piece of steel, etc., etc. This repeated a hundred times becomes automatic, habitual, unconscious—the sixth or muscular sense furnishing the connecting links. It is then easy to conceive of a number of situations where men have been injured due to an extra uncontrollable movement in a habit series.

"One solution for the problem of 'Injury Due to Carelessness' would be to change an employee's environment in the shop occasionally. To allow a man to work too long at one machine with one series of actions jeopardizes his safety. He becomes a slave to habitual coordinations. Safety-first signs must be changed frequently in design and effectiveness. Their particular location should not be constant. To teach safety is to make a man a better animal—to break up a tendency to nervous plasticity and to make habits more flexible."

Of Course You'll Dance!

OF course you'll dance while you are away for your vacation, and enjoy other indoor evening affairs. Let us commend to you Krementz Correct Evening Jewelry in a variety of designs for its correctness, its beauty of finish and its painstaking workmanship.

"Krementz" is stamped on the back of every piece to make you sure of the very limit of quality. That is the mark of integrity, for it says, without qualification:

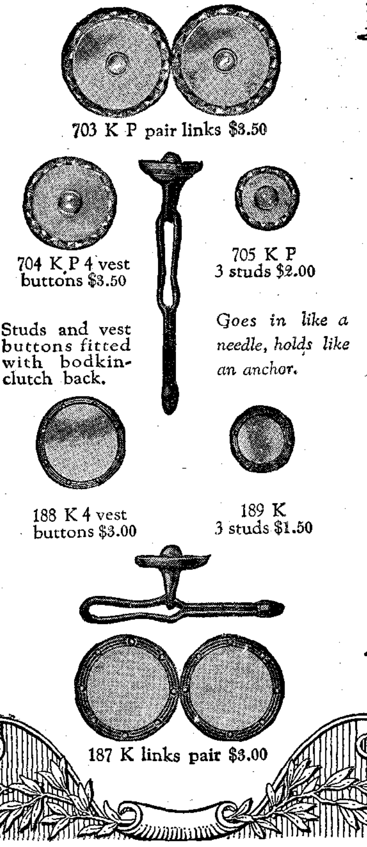
"If this article proves unsatisfactory at any time for any reason, any Krementz dealer or we will replace it free."

Sold by good dealers

Krementz & Co., Newark, N. J.

Krementz
14 KT. ROLLED GOLD PLATE

Mother of Pearl
Correct Evening Jewelry
Rims of non-tarnishing white metal



703 K P pair links $3.50

704 K P 4 vest buttons $3.50

705 K P 3 studs $2.00

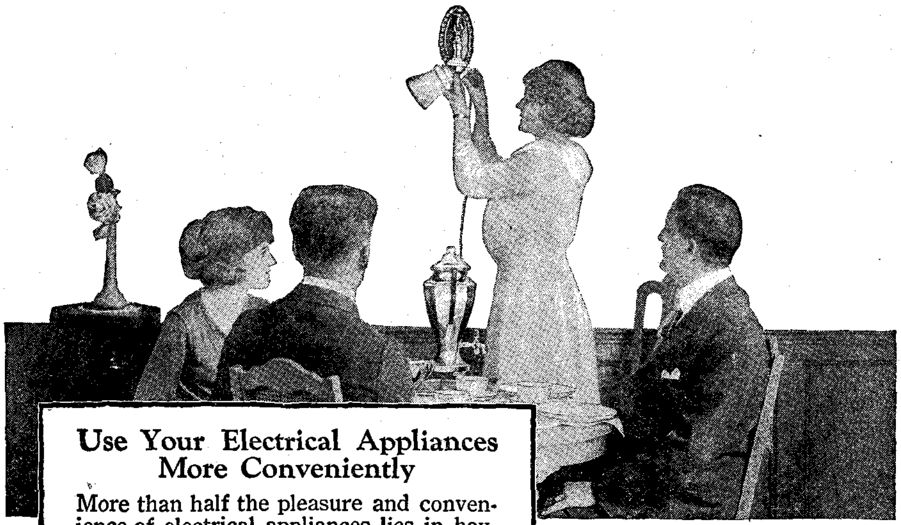
Studs and vest buttons fitted with bodkin-clutch back.

Goes in like a needle, holds like an anchor.

188 K 4 vest buttons $3.00

189 K 3 studs $1.50

187 K links pair $3.00



Use Your Electrical Appliances More Conveniently

More than half the pleasure and convenience of electrical appliances lies in having them ready for immediate service. There should be a place in every room where such an instant attachment can be made without fuss or bother of removing light bulb. The

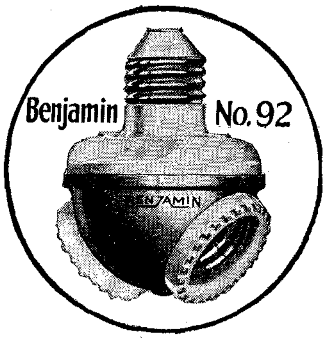
BENJAMIN TWO-WAY PLUG

does this for you. Provides two connections from a single socket. Gives you light and either heat or power at the same time.

"Every Wired Home Needs Three or More"

AT YOUR DEALER'S 3 for $3.50 OR $1.25 EACH Folder free on request.

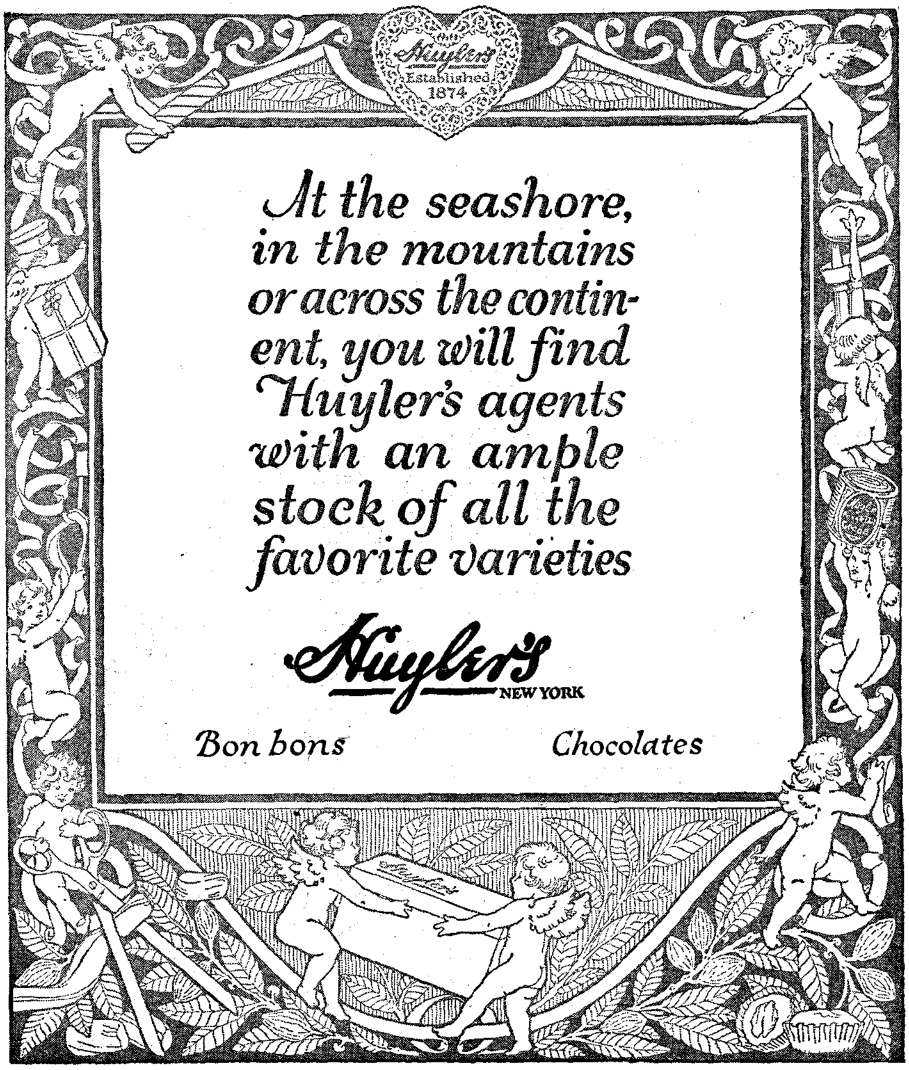
BENJAMIN ELECTRIC MFG. CO.
Chicago New York San Francisco



The Quality Plug

Ask your dealer to equip the cords of your electrical appliances with **Benjamin 903 Swivel Attachment Plug.** *It screws into the socket without twisting the cord.*

Benjamin No. 2452 Shade Holders *enable you to use any shade with your Two-Way Plugs.*



Huyler's Established 1874

At the seashore, in the mountains or across the continent, you will find Huyler's agents with an ample stock of all the favorite varieties

Huyler's NEW YORK

Bon bons Chocolates

SCIENCE AND INVENTION

Continued

ELECTRICALLY WELDED STEEL-FRAME BUILDINGS

THAT it is now possible to weld together by the use of the electric arc the parts of a steel-frame structure, giving it thereby greater strength than could be gained by riveting or bolting, is asserted by Otis Allen Kenyon, writing in *The Iron Age* (New York). Mr. Kenyon says that for many years those well versed in arc-welding have known that structural steel could be joined together for building purposes at lower cost and higher joint efficiency than are attained by these other methods. He asserts, however, that building departments and other inspection and control organizations have refused to allow the use of welding in building construction, on account of the fact that they did not feel sure of a welded joint. He continues:

"Welding, like reenforced concrete, depends for its quality and strength largely upon the skill and integrity of the workmen who install it, and building inspectors have assumed that it was impossible to judge the quality of a weld once it was made, and for this reason they have not been convinced by the various tests that have been performed for their benefit, altho such tests have demonstrated that welds can be made with 100 per cent. joints.

"Comparing welding with reenforced concrete, it is possible to lay out a welding job and determine in advance a sufficient number of the factors that contribute to the value of a joint to make a welding job much more definite and independent of the operators in its characteristics than is possible with concrete.

"In a welded joint there are four main factors which determine the quality of the weld: the design of the joint; the size of the electrode; the value of the current; the skill of the welder.

"Of these four the design of the joint is most important, one reason for which is that by properly designing a joint the skill required by a welder can be reduced to an almost negligible quantity. Having a definite joint to deal with, the size of the electrode can be determined by any one versed in the art of welding, and the choice of current value follows with the choice of electrode diameter.

"Of these four factors, three of them can be determined by the construction engineer, and it is possible to employ electrical equipment and structural methods that absolutely assure the maintenance of these three factors within definite limits. The fourth factor can be reduced to a minimum by proper choice of the first three, and can be maintained by proper superintendence, and, what is more important, a failure in this factor, the other three being properly maintained, can easily be detected by superficial inspection when one is experienced in the art of arc-welding. . . . . .

"As far as construction work is concerned, it is now possible to conduct welding with the same degree of safety as riveting or any other form of approved joint now in use.

"The first actual achievement in the line of building construction by welding was made recently when the Electric Welding Company of America let a contract to

SCIENCE AND INVENTION
Continued

T. L. McBean, who put up a structural steel shop, every joint in which was made by electric welding. In this structure, not a bolt nor a rivet is used except where wood is joined to steel.

"In connection with this investigation 1¼ × ⅜-inch bars were lapped 1¾ inches and welded and tested in direct tension where they developed the full strength of the bar, the break occurring not nearer than three inches to the weld and developing a tension of sixty thousand pounds per square inch.

"Another test was made with two 2 × 3 × ⅜-inch angles set at right angles and lap-welded at the intersection. In the machine they were set up in such a way that the load was applied at the end of an eight-inch lever arm, developing a beam load of 11,375 pounds at the weld or a torsional stress of 91,000 pounds with an apparent distress to the weld. altho the angles buckled to such a great extent that they finally failed to resist the load."

NEW INDUSTRIAL USES OF THE MOVIES

THE moving picture is on its way to becoming far more important in the industries than it ever has been in the field of commercial recreation. We are told by Alfred Pittman, writing in *Factory* (Chicago) on "How Movies Can Help You Train Workers," that scores of manufacturers are now using motion-pictures for dozens of different purposes. Recruiting employees, training them, and teaching lessons of saving are only a few of the factory uses of films. The uses explained in Mr. Pittman's article may suggest other ways in which movies can help in the factory. He leads off with a tale of how the head of a large machine shop found that in spite of training, some of his workmen were still wasting many motions on their jobs. For instance, before cutting each sheet of metal with a punch-press, the workman had to oil it with a brush of such size that he could do the oiling with two strokes. But some of the men still gave several strokes, spending perhaps twice as much time as necessary. Mr. Pittman goes on:

"The executive had said a great deal to the men and their foremen about this sort of thing, and he was looking for some more effective way of dealing with it. He wished especially to improve the instruction given new men so that they wouldn't so often fall into these inefficient habits. He decided on motion-pictures.

"The film which he had made shows one workman doing the job the right way and then another doing it the wrong way. Then it repeats the same two scenes simultaneously, side by side on the film.

"In this second showing the two men pick up the sheets of steel and start oiling them at the same moment. The first, doing the oiling in the correct way, of course gets to the punching sooner—when the other man is only about a third through the oiling. When the first man has finished the punch-press operations, his half of the screen goes dark, and the other is seen

TIFFANY & Co.

JEWELRY AND SILVERWARE

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CHASE
Leatherwove
THE UPHOLSTERY OF QUALITY
MADE BY SANFORD MILLS, SANFORD, MAINE

Rest Assured

that if your furniture is upholstered with "Chase Leatherwove" that you have the best —for long service and good appearance.

L. C. Chase & Co.
BOSTON
New York Detroit Chicago
San Francisco

One INCH Firing Surface

One thing Fyrac cannot do: it cannot compete with the *perfect* plug.

We know Fyrac. It is only a spark plug; but we have put our heart into it, we have given our heart to it, and we know it is chief of all the plugs that men have made. It is our pride.

That pride shall not be defiled by any claim that is inaccurate. We refuse to assert that Fyrac cannot carbonize. The plug that cannot carbonize has not been made. No one can foresee whether it will be made within the next generation.

We state merely that less carbon forms in Fyrac than in ordinary plugs. One of the main makers of carbon is unexploded gasoline. In the ordinary plug, one spark jumps the gap from the one-point firing surface

FYRAC

ONE INCH FIRING SURFACE

This shows the central electrode, from whose *one inch firing surface* sparks leap the gap to the stout right and left wires, made to live long. *One inch firing surface* insures reliable power, and prevents gasoline-formed carbon.

to another point. This single spark ignites only part of the gasoline.

From Fyrac's *one inch firing surface*, an inch of fire jumps the gap, so that many sparks ignite the gasoline in many places; every particle of gasoline is exploded, and gasoline-formed carbon is impossible.

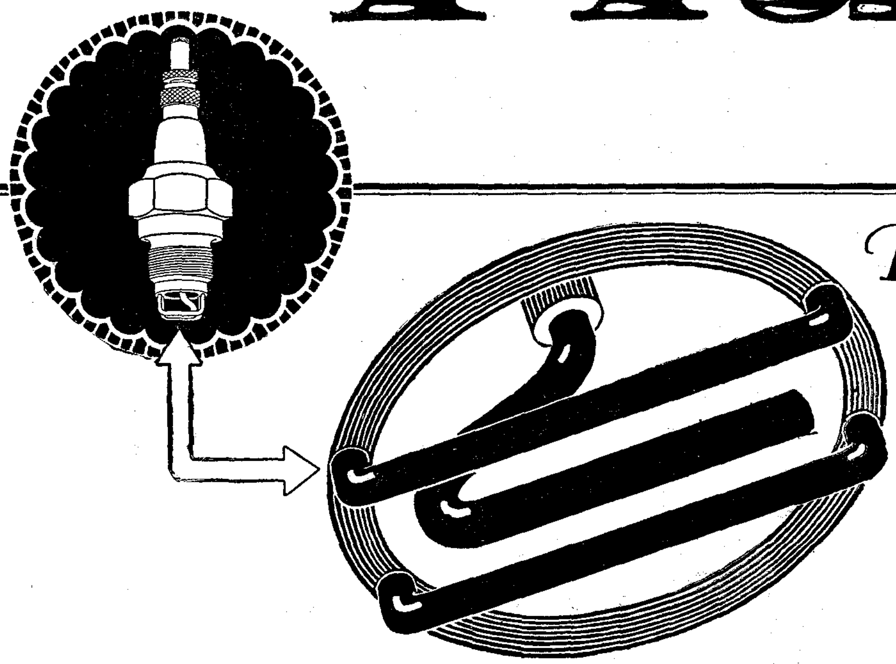
For many years drivers have pondered this evil thing in spark plugs: that power—burning, searing, scorching—jumps from one tiny point of firing surface to another tiny point that is bound to suffer and shrivel beneath this blistering blaze.

Now drivers rejoice in the plug with *one inch firing surface*—FYRAC.

From the *one inch firing surface*, the evenly spread blaze jumps the gap to another inch of surpassingly durable wire, whose every point is thus not only far stronger than the corresponding point in the ordinary plug, but need withstand only a tiny fraction of the shock that, in the ordinary plug, withers and shrivels the point.

FYRAC MANUFACTURING CO., *Rockford, Ill.*
Export Department, Werner & Butts, 336 Whitehall Bldg., New York, U. S. A.
Canadian Department, Campbell Agencies, 350 McKinnon Bldg., Toronto, Canada

Spark Plugs



Durable

High Living

which costs only one cent per dish

The Quaker Oats breakfast is the height of good living, for the oat is the greatest food that grows.

Practically every element the body needs is there in right proportions. And in a luscious food. No price could buy a better breakfast for the grown-up or the child.

Yet you serve a large dish for one cent—the cost of a bite of meat.

Quaker Oats yields 1810 calories of nutriment per pound. It supplies sixteen elements in well-balanced form. A pound of round steak yields 890 calories, and of eggs 635.

One cup of Quaker Oats contains as many calories as a pound of fish.

Food values

Note how foods differ in the cost per calory. These comparisons on necessary foods are based on prices at this writing.

Cost per 1,000 calories	
Quaker Oats	5½c
Average meats	45c
Average fish	50c
Hen's eggs	60c

85% less for breakfast

A Quaker Oats breakfast saves 85 per cent compared with the average meat breakfast. It supplies supreme nutrition for the first meal of the day. It saves the average family about 35 cents toward costlier foods for dinner.

Quaker Oats

The choicest one-third of the oats

In Quaker Oats you get just queen grains flaked. All the puny, insipid grains are discarded. A bushel of choice oats yields only ten pounds of Quaker. Yet these rich, flavory oat flakes cost you no extra price. Be wise enough to get them.

Packed in sealed round packages with removable cover

SCIENCE AND INVENTION

Continued

going on with the same operations for perhaps twenty seconds longer.

"Following this double scene, a printed table is shown on the screen illustrating the difference in the earnings of the two men for the day and the week.

"The worker gets a pretty vivid impression of wasted time and its effect on wages.

"The Cleveland Twist Drill Company has had a film made showing the proper ways of grinding drills for use on different metals. Much of this grinding has to be done in the tool-rooms of the manufacturer's customers, and the satisfaction the drills give depends largely on the skill of the customers' toolmakers in that work.

"The film showing the proper methods of grinding is being circulated among the manufacturer's customers. In at least one large factory, where it was exhibited several times recently, it caused much favorable comment among both the toolmakers and the executives of that department.

"A French manufacturer, according to information supplied by a member of one of the French missions in this country during the war, used movies to overcome the prejudice of his workmen against certain labor-saving machines which he was about to install.

"The picture showed two workmen sitting side by side performing the operations in the old and the new ways. In each instance, the old way required much greater physical exertion than the new. The two men sat with their backs to the spectators and were stript to the waist so as to show the difference in the play of the muscles in their shoulders and backs.

"'Animated cross-section' films have been used successfully in several plants in training workmen, especially on difficult or obscure processes. The basic method of the animated cross-section is the same as that of the animated cartoon, familiar to all moviegoers.

"The executive saw, or thought he saw, good possibilities in that sort of film for instruction in the telephone company's training-school. He had had the same kind of difficulty teaching candidates for linemen and operators the operation of the coin-boxes used at pay stations that he had found in telling his wife about the gear-shift. As a result of his representations, the company is now having an animated cross-section film made showing how the coin-box works.

"'The film is, of course, just an experiment,' said the school executive referred to, 'but we have high hopes of it. It ought to shorten the training of repairmen and operators.'

"A film showing the operation of the adding mechanism in a cash register has been in use several months in the National Cash Register Company's school for repairmen.

"The adding mechanism is a cylindrical device about half the size of a man's fist. It is composed of many small parts, and altho its principle is perfectly simple, it usually strikes the raw candidate for a repairman as something hopelessly intricate and mysterious.

"The mechanism itself was so small that it was necessary to be close to it to see the parts, and the instructor could therefore handle only a very small group of students at a time. When he pointed out some small part, the thing he pointed with often partly

SCIENCE AND INVENTION
Continued

obscured the part. The complexity of the surrounding mechanism often made it hard for him to get the student's attention centered on any one part. And then, much of the adding operation went on inside the mechanism, outside of any one's view; and when you took the mechanism apart to show what was inside, you could, of course, no longer operate it.

"The animated cross-section is blissfully free from all these limitations. It can be made as big, of course, as a motion-picture screen, so that as many people as can get into the room can see it. It singles out the particular detail that wants to be shown, and, being above the law of gravitation, suspends it in midair without any supports to obscure it.

"This type of film, incidentally, was first developed during the war for the instruction of machine-gun operators, to show them what to do when a gun 'jimmed.' It was used successfully in that work."

The motion-picture may even be made to show that which is invisible. It is well known, the writer says, that some of the commonest processes in modern industry have never been seen except in the mind's eye. That is true of the explosions in a gas-engine. They take place in obscured confinement and, besides, are too quick to be seen to any advantage, even tho the cylinders were made of glass. He goes on:

"Nevertheless, every one who knows engines has a picture in his mind of what takes place, and any one who is going to do much with them has to get that picture. Teaching gas-engines is pretty largely a matter of giving a man that picture, but it has had to be done in the past without showing him the thing itself. Words, diagrams, and models of one sort or another have had to suffice.

"At least one company is getting this picture to the students in its service school by the more direct method of motion-pictures. It has had an animated cross-section made of the engine used with its farm-lighting system. You see a pictured account of the whole process of ignition, as well as the artist could visualize it from his studies and talks with the engine builders, and it is all slowed up so that you can follow every detail of it, as of course you never could with the actual engine.

"Another film of this type, made for the repair school of a company that manufactures an automobile starter, pictures the accepted theory of magnetic fields. Here, again, the subject is something no one has ever seen, but it is something which any one who is to make any more than the most routine repairs on electrical equipment must have as a picture in his mind. The film shows first a primary circuit, then a primary coil, and what a primary magnetic field is supposed to be like, and then one after another all the stages in induction. Other details of the operation of the equipment follow.

"Both of these films are just now being put into use, and of course no record of results is available. But no one who has learned the theory of combustion-engines and of electrical induction in the old ways, and then seen these films will question

HEINZ
Vinegars

Every drop awakens flavor

THE IDEAL VINEGAR calls to life the latent flavors in foods, and blends deliciously with them. It gives a refreshing tang to the salad or vegetables to which it is added. Such are Heinz Vinegars, made with the utmost care guided by long experience, of the finest materials obtainable. Aging in wood for at least a year insures a most delicate flavor and aroma.

MALT, CIDER and WHITE

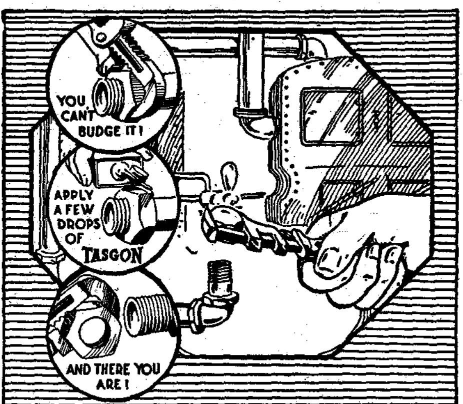
Pints, Quarts, Half-Gallons in bottles filled and sealed in the Heinz establishment.

HEINZ
PURE MALT
VINEGAR
HEINZ
57
ONE QUART

HEINZ Imported Olive Oil *is the first pressing from choice olives in the Heinz establishment in Seville, Spain. In bottles or tins.*

Some of the 57
Spaghetti
Baked Beans
Apple Butter
Tomato Ketchup

All Heinz goods sold in Canada are packed in Canada


YOU CAN'T BUDGE IT!
APPLY A FEW DROPS OF TASGON
AND THERE YOU ARE!

TASGON

When you use a wrench—use Tasgon

TASGON is a wonder worker for loosening rust. A few drops will instantly loosen nut, bolt, joint or connection.

No tool kit, home, factory, farm, garage, railroad or machine shop is complete without it. Banishes clipping and cutting. Saves time and labor. Will not injure any metal surface.

Not only does Tasgon dissolve rust, but around motor vehicles it is equally effective in preventing carbon, stopping squeaks in springs, brakes, locks and hinges, priming cold motors, cleaning spark plugs, loosening tires from rims, etc.

Tasgon has a hundred uses—all in one. For sale by hardware and automobile supply stores in half-pint, pint, quart and gallon cans. For $1.00 we will send prepaid a nozzle-top pint can if your dealer cannot supply you.

Polygon Products Company
141 Milk Street - Boston, Mass.
(*Made by* Samuel Cabot, Inc.)

Tarr-Gon

Another Polygon product—removes tar, grease, oil, spots and stains from automobile bodies, tires, leather cushions, carpets, rugs, upholstery. Cleans windshields and headlights. Will not injure finish or fabric. In half-pint and quart cans.

INSYDE TYRES

--genuine inner armor for auto tires. Double mileage; prevent punctures and blowouts. Easily applied without tools. Distributors wanted. Details free.

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American Accessories Company Dept. 316 Cincinnati, Ohio

Fenton Seals Stick

Fenton Seals

They stick where you stick them. Printed on the toughest paper. Unlimited variety. Prompt delivery regardless of size of order. Send today for catalog.

Fenton Label Co., Inc.
506-512 Race St., Phila., Pa.

PURITY CROSS
FOR SUMMERING.

⊕ Deviled Ham ⊕ Deviled Ham with Chopped Olives ⊕ Boned Chicken ⊕ Chicken in Jelly in Glass ⊕ Chicken a la King ⊕ Welsh Rarebit ⊕ Ox Tongue, etc.

Handy Tins at Quality Stores

Aside from its deliciousness, each Purity Cross Delicacy provides greater economy in terms of net trimmed meat.

Made by a Master Chef in a Model Kitchen
THE PURITY CROSS MODEL KITCHEN, ORANGE, N. J.

SCIENCE AND INVENTION
Continued

that they will be of great assistance to the student service men.

"Cross-section films for instruction were first developed during the war—for the training of workmen in the war-industries and of soldiers. Speaking of the war-time films, one of the men who had most to do with them, said:

"'As you know, the war was largely a war of machinery, with its ultimate ideal a flame-projector or a rapid-firer in almost every fighter's hand. Depth bombs, steam-shovels, and machine guns had to be understood and operated almost in myriads, and in a great many instances by men who had had nothing to do with such equipment before. All sorts of raw recruits had to be taught how to use these complex and costly mechanisms.

"'Animated sketches in films were made, first of some of the simpler mechanisms, and the results were so satisfactory to the officers detailed on them that plans were quickly made on a larger scale. Soon a student group in an officers' training-camp was taken into a hall to be shown "moving *x*-rays" of the hand-grenade, the operating interior of a machine gun, and cross-sections of cannon in the act of firing. And so it went.

"Explosions were slowed down so that they were viewed as a progression, seen through the open side of a gun. All the ordinary faults of operation were exposed, and their results, however dangerous, shown plainly and repeatedly without harm. Once filmed, disaster and destruction were repeatedly reproduced in a hall without damage. Darkness, except on the screen, excluded all distraction. Subjects were displayed and removed from the canvas at will. There was no difficulty of crowding or craning. Everybody could see what was being exhibited.

"By such means it took little time to turn raw recruits into expert operators of the most expensive and delicate machines of war. Before complicated instruments are touched they are perfectly understood in theory. From that point it was a short step to the proficiency that comes with manual familiarity.

"It was not merely illiteracy and the confusion of languages that were more or less brushed aside with the films, but deficiencies of vision as well. The least perceptive minds came before the screen on a level, in many respects, with the more imaginative.

"Teaching employees a manufacturing process as a whole, so they may better understand their particular part of the process, its importance, and its relation to the other steps and to the whole, is the object of a film which was made and used by the Western Electric Company. In some of the manufacturing processes of this company there are dozens of specialized operations, and an employee is likely to get in a rut and stay there.

"Movies, however, provide a way to give the employee a proper perspective of the whole process on which he is working. In fact, the movie lesson may be even more logically arranged than a visiting trip, because related processes may be shown together or in the proper sequence along with the necessary explanations, while in the factory itself these processes might be so separated as to make it difficult for the worker to see the connection clearly."

SUGAR YARNS

UNDER this heading some of the rumo that have appeared in the daily pre during the past thirty days about the suga shortage and sugar prices are discust in *Th International Confectioner* (New York) The writer first takes up the charges tha certain individuals were hoarding suga He writes:

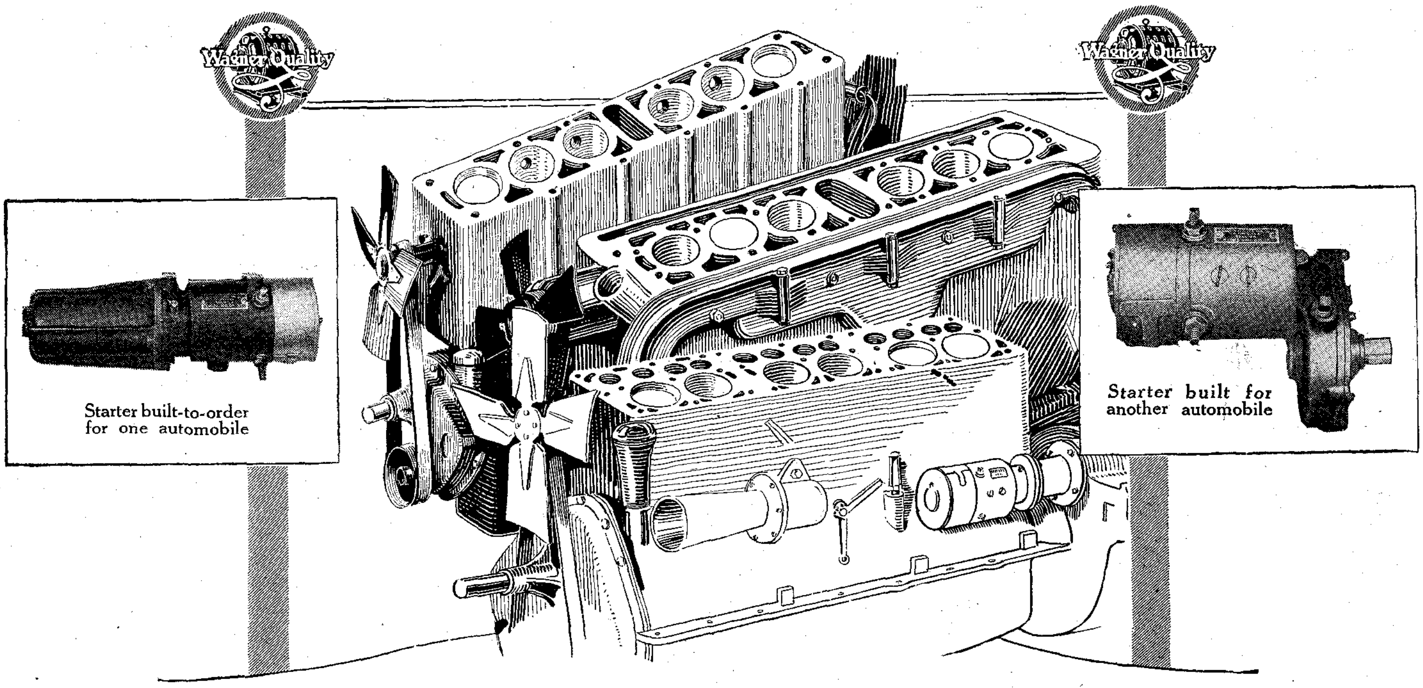
"In many instances some nosey individual saw a supply of sugar stored in a warehouse and immediately raised the hue an cry and had the holder or owner or receive of the sugar up before some half-bake minor official or some political-minded an ambitious assistant district attorney, an with the usual gang of newspaper scribbler right on the job, it was only natural tha the dear public got an earful in the evening editions, generally with the head-line 'Sugar Gougers Caught.' After the instigators, investigators, and misinformation makers got through with their bellowing, the defendant, in most cases, was able to explain why he had the sugar, where it came from, for whom it was stored, why it was stored, who bought it, who sold it, and how much it cost, and there the matter ended.

"It is true that once in a while a real robber was caught—generally a wholesale grocer with an alien name—and the temptation for such individuals to grab some extra profits while the grabbing was good proved too great to be resisted. Where they made the mistake was in being caught!

"We have also heard our learned Senators and Congressmen get up in their respective houses and tell all they didn't know about sugar, and while they mean well, yet such distinguished gentlemen, being full of their own verbosity, are often prone to make misleading statements which a gullible press never hesitate to print in full. The public—and the confectioners are included with the public in this instance—read these discussions on sugar and get misled. They assume quite naturally that prominent public men, such as Senator Capper, know what they are talking about, and so when the latter goes into paroxysms of indignation over the amount of sugar that is being exported from the United States, they assume that he is justified in his indignation and say to one another: 'So that is why we have a sugar shortage, it is all going to England and France.' What they don't know and what the Senator failed to mention was the fact that this sugar which is being exported in great quantities belongs to England and France, was bought by them raw in the open Cuban market, and was sent to the United States to be refined on a toll basis for their own use. It was their sugar. They were not buying it from us or taking it from the American housewife or candyman.

"If some of our Senators had been on the job as much before the sugar crisis as they are now, England and France would not have been able to grab such a big share of the Cuban crop and at a much lower price than our refiners had to pay when they did finally make up their minds to buy.

"Another canard was a statement to the effect that some one, somewhere, somehow had 300,000 tons of sugar hoarded in New York. Where in the name of all the Apostles could any one store or hide that amount of raw sugar in New York when warehouses or storage-space costs as much per foot as Broadway real estate? We know of one manufacturer who had the foresight and money to buy and store 18,000 bags of



Starter built-to-order for one automobile

Starter built for another automobile

Because Engines Differ

Even tho several engines have the same rated horsepower, bore and stroke, the power required to start them frequently differs considerably. The compression developed in each engine varies widely and the size and number of bearings and their tightness is seldom the same.

Because of these facts, Wagner Starting Motors are built-to-order for the work they must do. Before a motor is designed for use on any particular car, careful measurements are taken of the power requirements and individual characteristics of the engine it is to serve.

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SCIENCE AND INVENTION

Continued

raw sugar in order partially to protect himself and keep his factory running and his hundreds of hands employed.

"Another fact that has been twisted into a canard by the daily press and by the amateur sugar experts is the statement that there are a million bags of sugar in Cuba being held back for higher prices. The fact of the matter is that at this time of year and every year there is always about a million tons of sugar in Cuba. The extraordinary situation that faces the Cubans to-day is not of their making, and if the whole world wants their sugar they would be fools to sell it at anything less than the best price they can get. We know that a good portion of this reputed million tons has already been bought, and therefore can not be held back for a higher price.

"It would be well for our readers to pay less attention to the daily press on the question of sugar and be guided by their own trade papers and such reputable sugar brokers and supply men as they have been in the habit of dealing with for many years past. Remember that the sugar shortage is no fake but a real, grim fact; and when supply falls away short of demand, human greed causes speculation, and the only solution of the problem is either increased production to meet demand or reduced consumption to equal the supply."

TYPHOID IN WATER-MAINS—In an article quoted from *The Engineering News-Record* in our issue of June 12, under the heading "Turning Typhoid into City Mains," the following statement was made:

"Unfortunately, there are still some engineers, especially those in the employ of the fire-insurance companies, who see no harm in cross connections or who would put property risk above life risk."

The general manager of the National Board of Fire Underwriters, Mr. W. E. Mallalieu, sends us the following statements made by George W. Booth, Chief Engineer of the Board's Committee on Fire-Prevention and Engineering Standards:

"The fire-protection engineer is not the responsible party in making the connection originally or in its continuance. Insurance standards require, for complete reliability, two independent sources of supply, and the plant management or the municipal authorities may, and often do, use one source which is unsafe or questionable from a sanitary standpoint, for the reason that it is a cheaper or easier one.

"The engineers or the National Board of Fire Underwriters do not, and believe other engineers should not, favor such connections, but there are cases where they have already been made and it is not possible, without the charge of discrimination, to refuse credit for them as emergency sources. It is, however, standard practise with many of the insurance bureaus to recommend secondary sources of supply which will be safe, as, for instance, a storage reservoir.

"The double check-valve, designed some years ago, for use on connections to sources of doubtful quality, has been permitted by some health authorities and has a satisfactory record. It should be installed most carefully and be maintained under a thorough inspection system."

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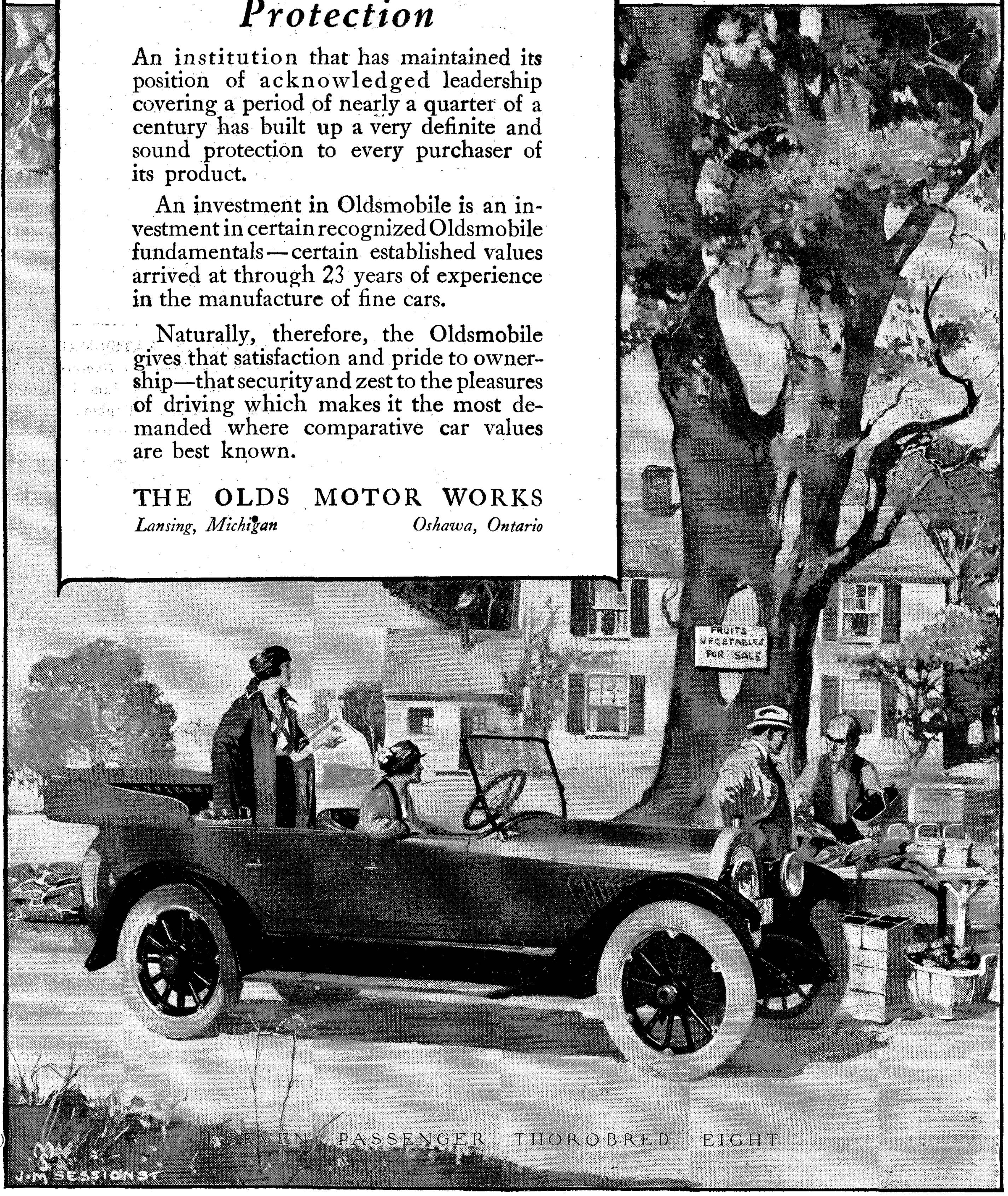

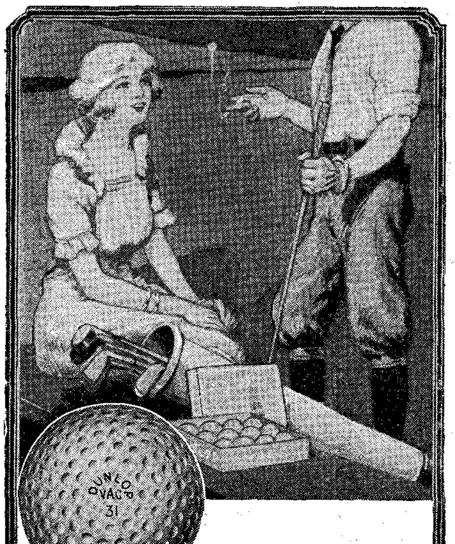

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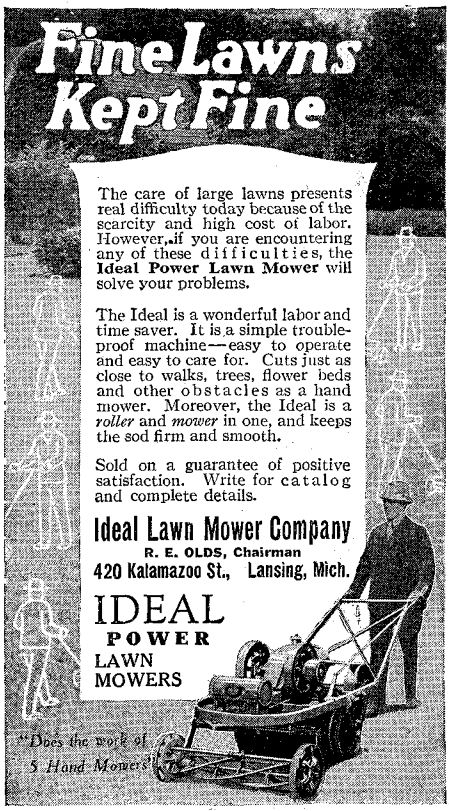
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REVIEWS - OF - NEW - BOOKS

BERNSTORFF'S BATTLE IN WASHINGTON

ONE by one the *apologias*, in the form of solid volumes, come out from Germany. They are not apologies—still less, regrets—for having entered the war or for pursuing it so as to bring a deathless stain to the German name. They are the efforts of high officials, military and civilian, to acquit themselves, to shift to other shoulders responsibility for the tragedy the weight of which they more than any others in the world realize. The latest comer to this class is Count Bernstorff's "My Three Years in America" (Charles Scribner's Sons).

Besides having an inside story to relate of what he, aptly enough, calls "the most important battle of the war," Bernstorff had other reasons for writing. When the conflict in Washington was over, and lost, tho, he avers, without fault of his, and he returned home, it was nearly two months before he was granted an audience with the Emperor; and he saw the real all-highest Ludendorff only because he went to call on him. At this meeting he suspected what became later in his mind a certainty, "that they wished to make me the scapegoat for the United States's entry into the war." Why this odium shouldn't be his in history is the real reason for the book.

With copious use of dispatches from the German Embassy to Berlin and from the Foreign Office to him, he makes a good case. To most Americans, probably, interesting as is much of the evidence, it was hardly needed. For, disagreeably protuberant as Bernstorff undoubtedly was, few of us were without the feeling that he was working, wholly selfishly to be sure, with the President to "keep us out of war." To some who may have had the cause of the Allies too highly at heart, he was in this respect far too long successful. But to the Germans he could hardly have appeared thus. To those who knew only what General Headquarters wished them to know, he was the medium, if not the instigator, of German "notes" which, too often for their pride, acquiesced in our wishes. To those who knew all—if, indeed, any one in Germany, even Ludendorff, ever knew all—he was the perpetual damper on the submarine policy; the friend of Ballin, the pessimist; the democrat; the apostle of mediation. Hence, it is for German eyes, under whose vision the writer must live and gain whatever of future honors he can, that the book is leveled.

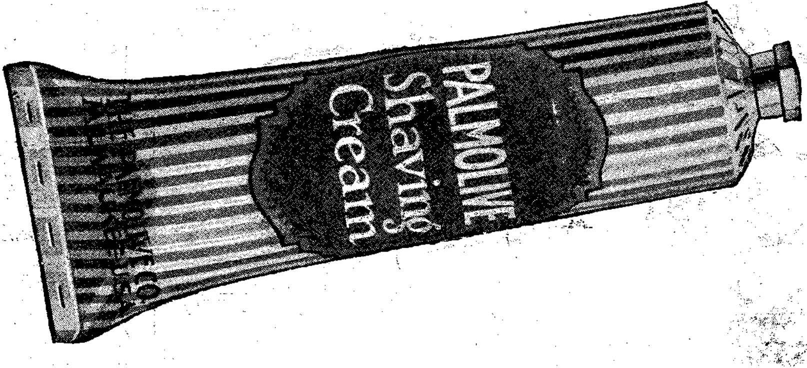
The present reviewer very well remembers an interview Bernstorff gave to a group of newspaper men who pocketed him in New York in the autumn of 1914. It wasn't a pleasant interview. It was arrogant, and a little bitter. It was in substance: Germany has won; she is invincible; she is ready to make peace. After the lapse of years, there is some satisfaction in discovering what was really in his mind. This he now reveals: that after the first battle of the Marne he realized, and Germany should have, that victory was beyond her reach. She should, therefore, "have striven to conclude a peace, the relatively unfavorable terms of which might perhaps have temporarily staggered public opinion." And his future program he makes clear: "As the German Ambassador in the greatest neutral state, with the evidence of American power all about me, I could not help feeling it my duty to maintain our diplomatic relations with the United States. I was convinced that we should most certainly lose the war if America stept in against us. And thus I realized even more and more the supreme importance of preventing this from taking place."

To these ends, therefore, his efforts were shaped. At each new example of Germany's will to win at whatever cost—the cases of the *Lusitania*, the *Arabic*, the *Sussex*, and the declaration of January, 1917, renewing unrestricted submarine war—it was his part to ward off the consequences of our deep and just indignation; and for over two years he achieved his purpose. More than once he did so by his personal vigor and resourcefulness. After the sinking of the *Lusitania*, and the first exchange of notes, a gulf appeared that "was bound in the face of prevalent excitement to lead to a severance of diplomatic relations, unless sufficient time were gained to allow the storms of passion to abate." So without waiting for word from Berlin he demanded an audience with the President. "I heard later," he says, "among other things when I was at Manila, that on this very day, June 2, all preparations had been made for breaking off relations and for the inevitable resulting war. As a result of my interview, however, they were canceled."

Again, after the sinking of the *Arabic* he acted without instructions. "I explained," he says, "both officially and also through the press, that on our side the United States would be given full compensation, if the commander of the *Arabic* should be found to have been treacherously dealt with. It was my first preoccupation to calm the public excitement before it overflowed all bounds; and I succeeded in so calming it." Fortunately for him, the action proved to have been well taken. For, tho curiously he did not know it, before the *Arabic* was torpedoed an order had been given that no liner should be sunk without warning and non-combatants made safe.

In the *Sussex* case he made a suggestion to Berlin which, if adopted, might have supremely influenced the outcome of the war. He urged that there should be no official exchange of notes, but that an oral agreement should be made for a provisional cessation of submarine warfare. No attention was paid to this. On the contrary, the Foreign Office sent "probably the most unfortunate document that ever passed from Berlin to Washington," evading the issue and casting doubt on whether the *Sussex* was really sunk by a submarine. "For the sake of his prestige, Mr. Wilson was now obliged to take action," and a reply was directed couched in the terms of an ultimatum. Had it not been for this ultimatum, Bernstorff says, relations even in 1917 would not have been broken off immediately. "In the increased tension of the situation resulting from the exchange of notes on the subject of the *Sussex*, I see, therefore, one of the immediate germs of the war with America. After this exchange of notes, a challenge in the form of our formal declaration of the 31st of January, 1917 (renewing unrestricted submarine warfare), could no longer be tolerated."

When this final declaration was decided on, Bernstorff did all he could first to pre-



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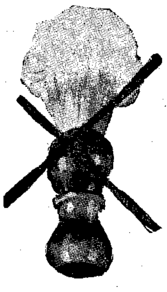

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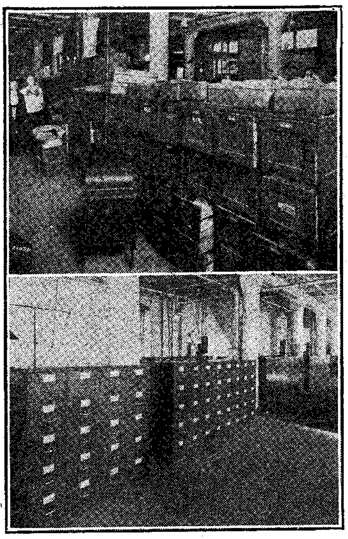

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REVIEWS OF NEW BOOKS

Continued

vent, then to delay, it. On January 19 he warned Berlin, "War inevitable in view of proposed action." Again, on January 27, he telegraphed: "If the *U*-boat campaign is opened now without any further ado, the President will regard this as a smack in the face, and war with the United States will be inevitable." The truth seems to be that by this time General Headquarters had definitely gained the upper place in Germany, and that little faith was placed in mediation by the President. Rather, it was felt the submarine could end the war in a few months. Our participation was not disbelieved; its importance was wholly underestimated.

Apart from the insight Count Bernstorff gives of the diplomatic struggle, his book is interesting for the light—and shadows—it casts on some of the chief American actors: the President, Colonel House, and Ambassador Gerard; and for what it says about the German propaganda and conspiracies. The pictures are not in full length; they are incidental to the narrative; but they are the touches of a shrewd and wholly sophisticated hand. That of the President is not unfriendly. Bernstorff realizes that because of descent, education, and training, "Mr. Wilson was never even near to being pro-German." He was honestly neutral. "In spite of the fact that he was almost entirely surrounded by anti-Germans, no unneutral remark of Mr. Wilson, even in private, has ever reached my ears," he says. Other strong characteristics of the President imprest themselves on the Ambassador. He is a "recluse and lonely worker," who "does not like company"; "an implacable enemy when once he feels himself personally attacked or slighted." "He likes to postpone decisions until they are inevitable." His "personal sensitiveness and egocentric nature played an essential part in all the negotiations." Yet notwithstanding his "strong will and autocratic leanings," he is quite alive to public opinion. "In his speeches he always tries to voice public opinion, and in his policy to follow its wishes."

Perhaps the gravest imputation Bernstorff makes is that the President's policy was sometimes dictated by the wish to have for himself the leading rôle. Especially is this evident in the negotiations looking toward an offer of mediation by Mr. Wilson late in 1916, an offer which was cut under by the German Chancellor's peace proposals. When the President heard of these proposals, Colonel House told Bernstorff, "he was very much disappointed"; "he would naturally have liked to take the first step himself." And "even to-day," says Bernstorff, "the bitter feeling still rankles within him that the German Government deprived him of the glory of being the premier political personage on the world's stage."

If there are some shadows in the picture of the President, there are none whatever in the estimate of Colonel House, who, it is said, described himself to the wife of an English Cabinet Minister as "the eyes and ears of the President." That these eyes and ears were the most influential in America during the war Bernstorff does not leave open to much doubt. The relations between the two men, to accept the Ambassador's implications, were extremely cordial. "Of course," he says in one place, "I could exert strong influence on Colonel

REVIEWS OF NEW BOOKS
Continued

House." Again, "As always in strictly confidential matters, I referred this to Colonel House." Still again, "Colonel House, with whom, as is known, I am in constant communication." The German Foreign Office was not unimprest with the peculiar relation: "Your Excellency should discuss the position cautiously with Colonel House, and find out the intentions of President Wilson," Bernstorff was told. But that so much power should be exerted, however wisely, by one who was not only not responsible, but whose real attitude could be completely canceled, may be a little disquieting. Against such a figure public opinion may fret, but in the end it is really impotent.

Of Mr. Gerard, whom he had known "for many years," Bernstorff's view is less friendly, due, no doubt, to the former's "anti-German tendency." Because of this, at any rate, he says, the American Ambassador "was not popular in Berlin," and in 1916 "his recall was eagerly desired." Of this, however, Colonel House told him, owing to the political situation, there could be no thought; but he arranged that the Ambassador be summoned to Washington for fresh instructions. During his stay the Foreign Office telegraphed Bernstorff, "Replacement, or at least further retention, of Gerard in America desired in Berlin, provided that it is possible without wounding his vanity and sensitiveness to our disadvantage." No successor, however, Colonel House reported, was available, adding apparently that "Mr. Gerard is at least straightforward and does exactly what he is told. He has received very detailed instructions." The nature of these instructions may be surmised from a report sent a little later to the German Government: "Mr. Gerard in a speech at a farewell dinner given to him in New York declared that Germany had won, and could not be robbed of her victory." Yet the fact that Mr. Gerard could "sing another song" did not spare the German Ambassador, on his return home, from the reproaches of the Emperor for having "let him down most dreadfully" by recommending the nomination of such a "Tammany Hall creature."

Two considerable chapters of the book are devoted to the "German Propaganda" and to the "So-called German Conspiracies." Tho the Ambassador writes with seeming candor, he takes good care not to step far beyond facts already known. Moreover, he asserts an almost incredible ignorance of what the military and naval attachés of his Government were about. "I was," he says, "in no single instance privy to any illegal acts, or to any preparations for such acts." About all one can say of this is that no tracks were left to the Embassy's door. For when the recall of Boy-Ed and von Papen was requested, Bernstorff asked Mr. Lansing if he was "tarred with the same brush." "The Secretary assured me that I was by no means involved, and that I should not, under any circumstances whatever, give up my post."

And pleasant personal relations he was able to maintain to the end. In a farewell letter Mr. Lansing said: "I shall bear in mind all your earnest efforts in the cause of peace, and will gladly recall our personal relations, which, in spite of the difficulties of the situation, were always a pleasure to me."

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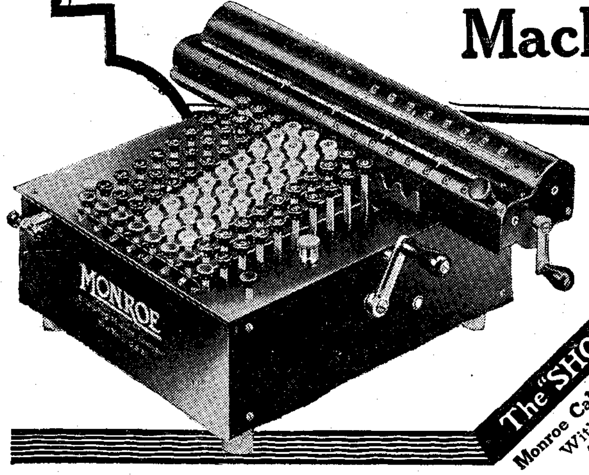

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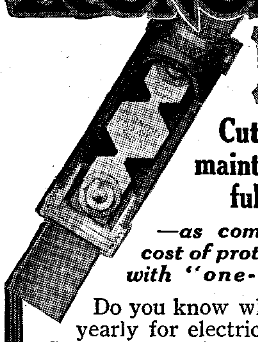

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REVIEWS OF NEW BOOKS

Continued

A WORD FOR THE PRESIDENT

IT will be impossible properly to estimate either Woodrow Wilson or his work until time has revealed a great deal that must now be a sealed book, and until the political jealousies of the day are forgotten. But it is possible, and profitable, to gather together such facts about him as are available, if for no other reason than that these will assist the historian of the future. "With a view to a just estimate of President Wilson," Prof. William E. Dodd, of the University of Chicago, has written "Woodrow Wilson and His Work" (Doubleday, Page & Co.). The book is produced while the President lives "and while his bitterest enemies occupy the center of the public stage." The writer's chief hope is that "some misinformed people may come to a saner view of Woodrow Wilson and a more historical interest in the development of our country along liberal lines.

Professor Dodd's book is frankly a partizan document. As a plea for a man and a party, his book is a record and an interpretation well worth studying, no matter what one may think about that man or that party. The family life, the early career, and first stages in the long struggle of the future President are clearly exposed in the opening chapters. The development of his chief reform policies may be traced from the first. As far back as 1879 Wilson the student laments the "hit-or-miss methods of Congress, the failure of American Presidents to outline policies and seek to guide legislation." He felt that the Federal Government required genuine leadership, and he repeatedly pointed out the error of the divided and none too well defined activities of Congress, the Supreme Court, and the Executive. The presidency at Princeton allowed Wilson a wider field in which to develop his broad democratic ideas. The candidacy and nomination of Woodrow Wilson as Governor of New Jersey constitute an interesting chapter. Representatives of the Old Guard turned to him in the belief that his record—which was politically clean, would assure his election. But the "schoolmaster" was careful to make clear his intentions. When Colonel Harvey and James Smith, Jr., backed Wilson they were given no assurances of political "favors." He never "absolutely committed himself to anything except that he would accept a nomination if offered and that Smith's ambition to return to the Senate was not to be suffered to embarrass the progressive Democratic movement."

Immediately after Wilson was nominated he declared: "I did not seek this nomination. I have made no pledges and have given no promise. If elected, as I expect to be, I am left free to serve you with all singleness of purpose. It is a new era when these things can be said." Later in the campaign he declared that if he were elected, he would consider himself "forever disgraced" if he should "in the slightest degree cooperate in any such system or any such transactions as the boss system describes." It was this man who was elected to the Governorship of New Jersey, and the same man long after to whom the country turned, believing he would effect some of the most sorely needed reforms.

Hardly had Woodrow Wilson carried out the more important campaign promises during the early part of his first term as President before the war broke out. He was of necessity thrust into a new situation, and every effort was bent upon new problems. It will be seen that long before he was called upon to face a situation in some respects graver than any situation ever faced by a President of the United States he had made up his mind about essentials. On July 4, 1914, we find him announcing this *credo:* "My dream is that as the years go on, and the world knows more and more of America, it will turn to America for those moral inspirations which lie at the basis of all freedom; that the world will never fear America unless it feels that it is engaged in some enterprise which is inconsistent with the rights of humanity."

The Wilson who was at heart opposed to war carried the country with him during the three years when the country was on the whole quite willing to remain out of the conflict; and this, we are told, in spite of the bitter attacks of the Junkers.

But when the day came, when at last the United States felt it could no longer remain apart from the conflict, the President spoke to the world on behalf of a nation united, agreed for once that anything short of a declaration of war was insufficient.

The next campaign revealed a curious state of affairs. Wilson the "schoolmaster," the Democrat, had succeeded beyond all expectation. And yet, the "President who had done more for the country than any other party leader ever had done, unless we except Washington and Lincoln, was attacked every day by eminent men and a great political party. Neither these men nor their party offered any positive program."

But Wilson was reelected. Facing problems graver than any he had been called upon to face, he entered the struggle with every fiber of his mind alert. And yet he was feared—by his political opponents. "It would be fatal to the party of industrialism if the prestige of Wilson were permitted to rise to higher levels. Everything conspired to hamper the President at the very moment he was contemplating his change of front with reference to the Great War."

This "change of front" was in conformity with the whole country's change of front. There was no escape. To the country, however, this meant war, and little else; but to the President the declaration of war opened up an unlimited field of problems. "If, then, Wilson abandoned his domestic policy and the so-called national isolation, he would only advance to meet industrialism on a world stage. It was only a shifting of the struggle from a reform of industrial abuses at home to a prevention of greater abuses and tyrannies of industrial men on a world scale."

What Wilson was "up against" was, in the view of Professor Dodd, no less than the selfishness and short-sightedness of the whole world, and the Professor's view of the case is unequivocally express when he says that "he and he alone could save mankind from the worst tyranny that had threatened it since the days of Turkish invasions." So long as he preached democracy, equality, the "will of peoples," and the rest most of the world was with him. The "fourteen points" were all very well—in theory. But when the day of reckoning arrived, and the President, at the Peace Conference, surprized the world by actually trying to practise what he preached, he found arrayed against him the forces that had ruled governments and cabinets and interests from the beginning of history. The first blow came from Clemenceau, "a second Bismarck." From then on the fight was a contest between the materialism of the past and present, and the high

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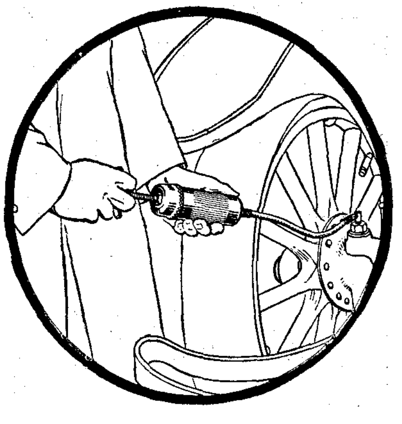

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REVIEWS OF NEW BOOKS
Continued

idealism of the "Golden-Rule" policy. The fight was carried on not only at Paris, but in the President's own country. Professor Dodd declares that "the leaders of the Republican party were doing their utmost, as must have been expected. Unquestioned success of Wilson at Paris would have been the ruin of their party for a decade to come." The President's apologist has at least made an unequivocal statement, tho he is well aware that party politics has obscured the facts, here as elsewhere.

But the world was not ready for Wilson and Wilson's ideas. "Few men have been able to rise to the level of Abraham Lincoln, and Lincoln himself did not live to test his doctrine of love. Wilson yielded to *force majeure*, thinking wisely, if the writer may express the opinion, that mankind was after all neither democratic nor Christian." Professor Dodd believes that it was the failure of a man in advance of his time, and that "unless democracy itself should fail, he will be read and quoted hundreds of years from now, as Jefferson and Lincoln are read and quoted now."

RUSSIA IN FIVE WEEKS

IF a skilful foreign journalist were to spend five weeks in the United States, doubtless he would gain some sharp impressions; but he would hardly understand us, and what we are really about. Of still less would he be certain if we happened at the time to be at war, and if we were trying all sorts of new strange political and social ideas, new to us and to the rest of the world. Yet five weeks is what Mr. Isaac McBride spent in Russia before writing his "Barbarous Soviet Russia" (Thomas Seltzer).

Perhaps it isn't unfair, therefore, to say that the most valuable parts of his book are not of what he saw and did, but of a few of the things he heard, and what he has gleaned from other sources. Thus we get a fairly clear account of the Soviet state—a highly complex representative scheme. Rural Soviets of ten or less members are represented in a rural congress; these are represented in a county congress; these in a provincial congress; these in a regional congress; and these, finally, in the all-Russian congress. All the congresses have their executive committees for handling local affairs. For the whole nation there is a Central Executive Committee, which is the supreme power of the Republic and which administers affairs through a council of seventeen commissars, or ministers, each of whom is the head of a committee. The American doctrine that the best sort of committee is one of three, two of whom are dead, can not be said to be in the best repute in Russia now.

Yet the last charge probably one would care to make of the Soviet state is that of inactivity. And some of the decrees that have come from the power at the top of the many terraces have been not a little shocking to sensitive western ears, not tuned to Russian harmonies and discords. By a decree adopted two years ago, but not yet completely in force, all property rights in land were abolished, and the land given over to the laboring population. A Supreme Council of National Economy has "the right of confiscation, requisition, or compulsory syndication of various branches of industry and commerce." With a few exceptions all citizens are subject to compulsory labor, for restricted hours and for

REVIEWS OF NEW BOOKS

Continued

a fixt remuneration which is adjusted every two months to meet the depreciation of the ruble. The right of inheritance has been done away with. Only civil marriage is recognized and divorce is granted on the petition of either or both parties. Children born out of wedlock have the same status of those born of a registered union. But the author repeatedly denies that there has been any "nationalization of women."

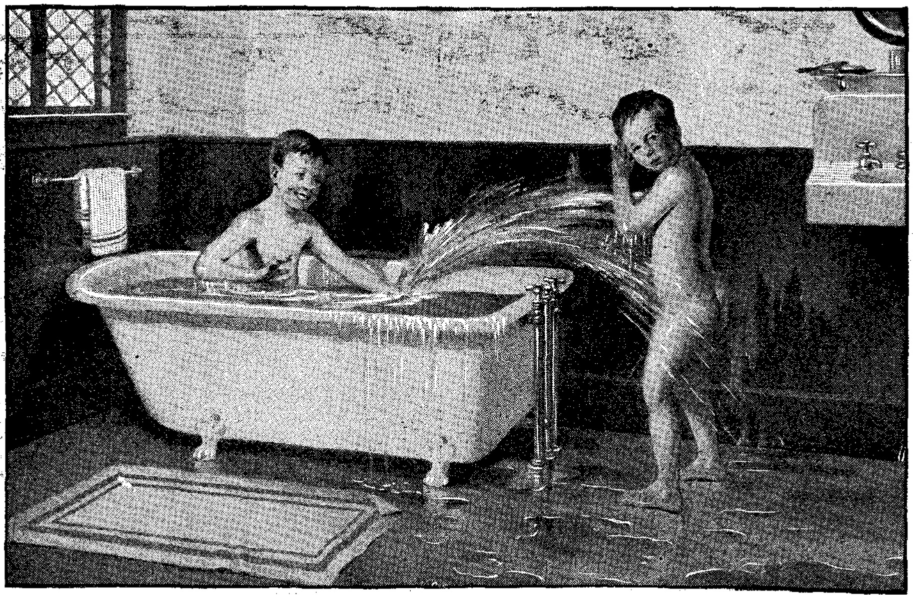
Much attention has been given by the Government to art and to education. "Art" now very properly "belongs to every one." In the two years of the revolution ten thousand new schools have been opened, and twenty-five hundred libraries have been established. In the Northern Commune all adults unable to read or write have to attend a public school two hours daily for six months, with the penalty, which certainly would be dear to an American boy, that if unable to pass their examinations they are "denied the right to work." All the larger towns have high schools, technical schools, and musical conservatories. In the advanced technical schools students are furnished with food, clothing, living quarters, books, and, American college presidents may well note, "with tickets for theaters, concerts, and other entertainments." In Moscow, the Government last autumn was feeding 359,000 children daily.

With the children, the soldiers come first in the consideration of the Government. The army now consists of two million men, with still another million in reserve. To the observer passing through the lines there seemed no lack of small arms and cannon, and in general the men were warmly clad and strongly shod. "Certainly they were in good spirits." Their morale is kept up by a carefully organized system of propaganda: the "Red" soldier is convinced that he fights to keep Russia safe for the revolution. Strange as it may seem, the author was told that 75 per cent. of the Czar's officers are in the Soviet Army.

But tho the army is rather comfortably maintained, the rest of the population, especially in the cities, is undoubtedly suffering from malnutrition and lack of fuel. In Petrograd and Moscow the streets are fairly clean and are well policed, but they are dimly lighted. There is, says Mr. McBride, no "Red" terror, yet during his stay of ten days in Moscow sixty men and seven women were shot for complicity in a counter-revolutionary plot.

The author is clearly of the opinion that "Russia stands overwhelmingly in support of the Soviet Government." Some opposition may be found among the peasants who, tho better off than urban dwellers, are disgruntled because of deficiencies in transportation and shortage of manufactured articles. But this opposition is being systematically and earnestly met.

Will the effort of the Soviet officials end with the frontier? Mr. McBride was assured that it would, and that the Government would give guaranties not to engage in revolutionary propaganda abroad. More than once he was told that "all Russia wants is to be let alone." On the other hand, Lenine, who is the great power in the Republic, may have a different view. In an interview with the author he said, "The Soviet power will win the whole world, however furiously, however frantically, the bourgeoisie of all countries may rage and storm."



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INVESTMENTS AND FINANCE

TO RECKON ALL FOREIGN EXCHANGE IN CENTS

A NUMBER of banks and dealers in foreign exchange have been trying out a new method of quoting franc and lira exchanges (France, Belgium, Switzerland, and Italy), notes *The Business Digest and Investment Weekly.* Heretofore, while English pounds and German marks, for instance, have been reckoned according to their value in dollars and cents, these franc and lira exchanges have been quoted in the number of units of the foreign currency that might be bought for a dollar. The change now inaugurated is to the simpler and less confusing method of quoting them in cents, that is, "instead of French francs being worth 16.56 to the dollar, which means 16 francs, 56 centimes, the quotation will read 6.04 to the franc." As we read further:

> For several years, or ever since the foreign-exchange market became a thing of popular interest, a great many persons have been unable to understand why French francs, for instance, should "advance" when the quotation moves from 16.40 to 16.25. The reason, of course, was that at 16.25 francs were more valuable, for it took fewer of them to purchase an American dollar. Similarly, they "went down" when the quotation moved from 16.00 to 16.50.
>
> Rather curiously, Spanish pesetas, which normally are of the same value as francs, 19.3 cents each, have been quoted in cents per peseta for years, and the present scheme, which has not as yet become general, is to quote all foreign exchanges in this same way.
>
> Despite the obvious reasons in its favor, it is obvious also that any change of notation so far-reaching, involving as it does a complete change in the long-established methods of computing exchange, means a considerable change also in one's mental processes. It is not surprizing, therefore, that not all foreign-exchange bankers and dealers are yet in favor of the new plan.

The new plan commends itself to *The Financial World* because interest in foreign exchange is growing so rapidly in this country and dealers' time is often taken up in lengthy correspondence explaining the confusion over the two ways of reckoning the exchange "to our thousands of budding world bankers without seeming ability to clarify their clients' mind on the matter." If, in the future, when a franc is worth but six cents in our money it is quoted as such, "then the holder of francs will no longer be in a maze of doubt when the franc either appreciates or declines in value," and

> The same rule will hold in the quotations for the money of the other countries. There is no reason why the movement should not succeed, for it would popularize more than ever speculation in international money. To a certain extent such speculation would also exert the tendency of strengthening the foreign-exchange market, which in itself would provide a firmer basis for foreign credits in our country—a condition which our bankers would like very much to see brought about.

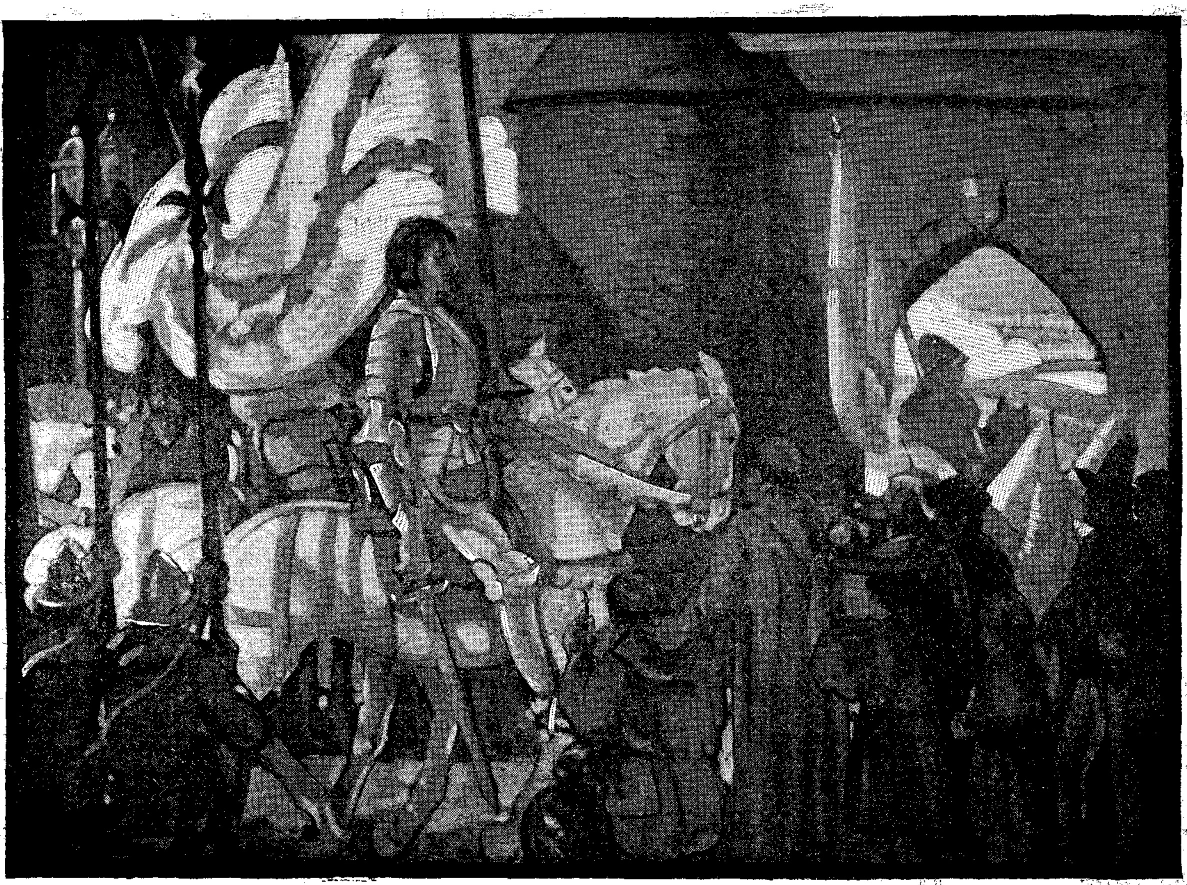
WHY THREE BILLION POUNDS OF COPPER WERE USED UP LAST YEAR

IN the year ending April 1 last world consumption of copper reached 2,970,000,000 pounds, "a figure never before approached in peace or war." Yet this statement, continues the Boston *News Bureau,* comes over the signature of John D. Ryan, who is generally considered this country's greatest authority on the copper business. The Boston financial daily tabulates Mr. Ryan's figures as follows, in pounds:

Production of United States refineries during past two months		1,800,000,000
Production outside of United States refineries		450,000,009
Stocks of copper in Europe April 1, 1919		545,000,000
Stocks of scrap in Europe April 1, 1919		385,000,000
Stocks purchased from United States Government		100,000,000
Copper contents of government scrap		150,000,000
Total of stocks production and scrap		3,430,000,000
Deduct increase in refinery stocks in United States	240,000,000	
Deduct stock of copper and scrap in Europe	220,000,000	460,000,000
Leaving apparent world consumption past year		2,970,000,000

The average layman, comments *The News Bureau,* "can not understand how it is humanly possible" that for the twelve months under review there could have been at the outside more than 75 per cent. of the prewar consumption of copper, "with Europe prostrated, her credit impaired, and her industries crippled." It, therefore, presents an explanation from a business authority who indorses the Ryan figures in every respect:

> In the first place, there is not a doubt but that the American consumption of copper from April 1, 1919, to April 1, 1920, not only exceeded all records, but for the last six months of that period was at a rate greater than the whole world's consumption in any year previous to the war.
>
> England and France, it is to be remembered, kept their factories on war-work for some months after the war actually ended, to keep their labor employed, thus avoiding the drop that we had here, and giving time for peace needs to take place of those of war. The peace business developed was tremendous, just as in this country, and the copper- and brass-manufacturing plants in England and France ran virtually at top-notch during the whole of 1919, and are continuing to do so. The manufacture of electrical appliances in both those countries exceeds, and has done so for months, any rate known heretofore, and they have orders ahead for very long periods. The brass business there has been very good, as you may judge from the large exports of zinc which have taken place from this country, and even a casual knowledge of the situation will reveal such a consumption from the early part of 1919 until now as has not



ROMANCE

THE Age of Romance still lives. As long as the heart of man beats in his breast it cannot die. For romance is nothing else than life in its highest mood of imagination and idealism, of courage and accomplishment, of understanding and achievement.

This is as true of life today as it was a thousand years ago; as true of America in this era of industry as it was of Europe in the era of chivalry. Life still holds aloft the torch of romance to fire the spirit of man, to kindle his ambition, to ignite the creative impulse of his energies.

Yet there is a difference between romance today and a thousand years ago. It beckons men less often down the path of sheer adventure; it leads them more often up the heights of constructive service to the world. It calls men to science, to invention, to industry, and to intellectual and moral leadership.

The history of industry is profoundly romantic; yet time was when its romance lay hidden from the world, a neglected asset, an undeveloped resource. Then came advertising, bringing with it fresh vision, a new perspective, penetrating insight; enlisting the eloquence of the artist and the writer; and carrying to the whole world the great romances of industry and of business.

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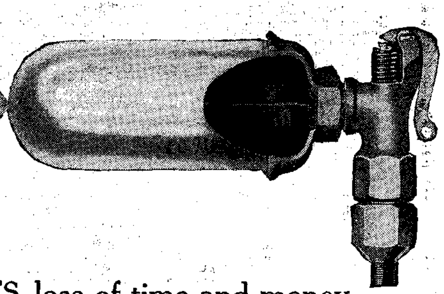

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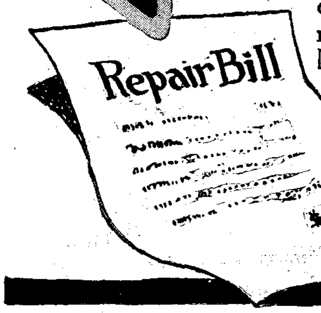

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INVESTMENTS AND FINANCE
Continued

before been equaled in any of the thre countries: namely, the United States England, and France.

The stocks existing in England, France and Italy at the beginning of the perio are, of course, exhausted to the poin where they can not be drawn down further due, of course, to the desire to use u every last pound of stock existing in th countries on account of the exchang situation.

Italy has not been manufacturing to th extent that England and France have, bu still has been doing a very large business particularly in electrical appliances an machinery.

The reason for the great consumptio in these European countries is the same a here: first, the people have more money than ever before in the world's history, and are spending it; secondly, all extensions o every kind, except for war-purposes, hav been held up for nearly five years; thirdly, labor for the manufacturing industries in those countries since the war has been plentiful and, as compared with ours, efficient and cheap. Plants that were expanded enormously during the war, just as they were in this country, have been able to turn out a bigger output than ever before.

WHY AMERICANS ARE DRINKING LESS TEA

IT was noted in these columns some weeks ago that dry America was importing and apparently drinking more coffee, but it is interesting to note with *Financial America* that America is now drinking less tea. This may seem odd in view of prohibition, but *Financial America* thinks that "the restraint of the liquor traffic has nothing to do with the decline of tea." In its opinion—

> The cause seems to lie chiefly in the character of the tea imported from the Orient in recent years. There have been complaints of adulteration of the tea-leaf with that of various other less desirable plants.
>
> Vigorous methods have been found necessary to enforce the law against importing such adulterated tea. The work of inspection was transferred this month to the Department of Agriculture by the Treasury. Expert Federal tea-testers will sample the products of China, Japan, and the East Indies, the principal producing countries. No guilty raspberry or blackberry product need apply for admission.
>
> In the last ten months tea imports have fallen to 84,000,000 pounds. This is approaching the figures of 1914 and earlier years. During the war a much larger trade was built up, exceeding 140,000,000 pounds in 1918. America then took over some of the oriental trade that England had abandoned.
>
> A growing thirst for the beverage seems to have been checked by the rankest folly on the part of the Japanese and Chinese exporters. They have been learning what Americans think of such practise in the falling sales of the last year. Our Government's efforts may save further loss if the adulterated article is rigidly excluded.

INVESTMENTS AND FINANCE
Continued

SMALL INVESTORS INCREASING LIBERTY-BOND HOLDINGS

THERE has been so much talk about small investors cashing in their Liberty bonds and thus helping to reduce the market price of these securities that the New York *Times* decided to investigate in its own city. It comes to the encouraging conclusion that just at present small investors are increasing their holdings rather than disposing of them. Inquiries were made at a number of New York savings-banks. The savings-banks generally have undertaken the safe-keeping of Liberty bonds for depositors without charge to the latter and, we read on the financial page of the New York daily, "of all the institutions questioned about the amount of the bonds held in their vaults by their depositors not one was found where the aggregate thus accumulated had decreased." He continues:

> Of eight savings-banks where inquiries were made all reported that there had been a steady increase in the amount of Liberty bonds held for depositors, while two of this number said the demands of depositors had reached such proportions that the privilege had to be discontinued. These banks had declined to accept any more Liberty bonds for safe-keepimg, not because they wished to discourage depositors from making investments in these issues, but because they found it was physically impossible to take care of the accounts with their organizations as at present constituted.
>
> In seven of the largest savings-banks of Manhattan, Brooklyn, and Queens the aggregate value of Liberty bonds held for their depositors was found to be approximately $17,000,000, or an average of about $2,500,000 for each bank. For the convenience of its depositors the Williamsburg Savings Bank is holding in round numbers $1,500,000 in Liberty bonds, and the controller of this institution says the amount is steadily increasing.
>
> At the Bowery Savings Bank the amount of Liberty bonds intrusted to the institution by its depositors is estimated at $2,000,000. Here also it is reported that the total amount held for customers is showing a gradual increase.
>
> The Dime Savings Bank in Brooklyn is holding for its depositors approximately $2,500,000 in Liberty bonds, and from the time that the bank made known its willingness to care for the securities of the depositors the holdings have shown a steady increase.
>
> What is described as a high-water mark has been reached by the Franklin Savings Bank in the amount of Liberty bonds safeguarded for its depositors. At present $2,735,000 in these securities is held for safe-keeping, and there has not been a single week in which the total holdings were not increased.
>
> The largest amount reported by a single bank was that of the Bank of Savings, which is holding $3,500,000 of its depositors' Liberty bonds. These holdings are steadily being increased.
>
> Depositors of the Brooklyn Savings Bank have accumulated $2,500,000 in

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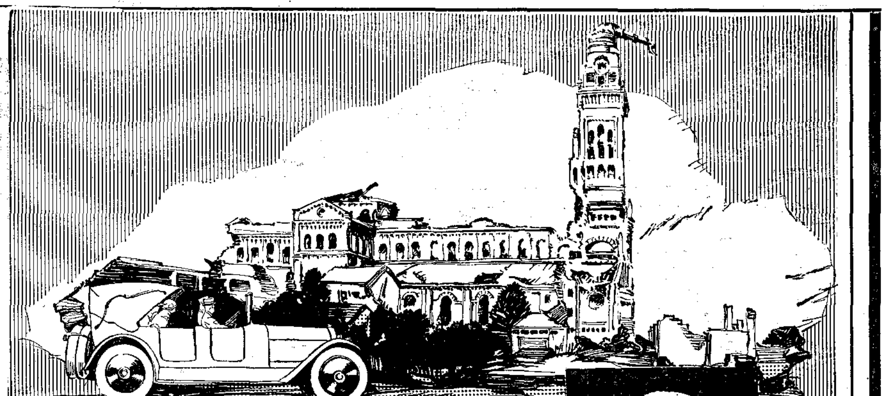

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INVESTMENTS AND FINANCE
Continued

Liberty bonds, which they have placed in the care of that institution, and the holdings are increasing rapidly.

Not only do the savings-banks generally agree to take care of Liberty bonds for depositors who have no safety vaults, but the banks undertake to clip the coupons and deposit the amount to the credit of the customer. In the first place, when a bond is placed in the care of the bank it is deposited to the credit of the customer, and unless he requests that a particular bond be returned to him on demand, a bond of the same denomination and issue as deposited is given back to him when he makes the request for its return.

HOW CANADA'S FARM WEALTH IS INCREASING

IN spite of the war the progress of agricultural wealth and production in Canada has been steady for the past five years, notes *Financial America*, commenting on official Dominion Government figures. The gross value of Canada's agricultural wealth in 1919 has been estimated by the Government at $7,379,299,000, and the figure, we are told, is arrived at thus:

> The total estimated agricultural production for the year is $1,975,841,000. From carefully compiled statistics the value of farm land throughout the Dominion is computed at $2,792,229,000; buildings at $927,584,000; implements at $387,079,000; and farm live stock at $1,296,602,000. All these items are added to the annual agricultural production, and the result is the Dominion's gross agricultural wealth.
>
> That agricultural wealth is increasing every year is obvious from the fact that each year sees increased settlement and new areas made productive, with a consequent augmentation in crop-production. With the settling of new territories, the penetration of railroads, and the other advantages which follow in its wake, land naturally increases in value, numerous farm-buildings spring up, farm-stock is introduced on a large scale, and more agricultural implements are needed and utilized.

With new farm-lands constantly being opened up and improved methods being used, increased production naturally follows. These figures show the progress Canada has made in the past five years:

Description	*1915*	*1916*	*1917*
Field crops	$825,371	$886,495	$1,144,637
Farm animals	73,958	110,201	156,569
Wool	3,360	4,440	7,000
Dairy products	146,005	152,816	232,822
Fruits and vegetables	35,000	35,000	40,000
Poultry and eggs	35,000	35,000	40,000
Total	$1,118,694	$1,223,952	$1,621,028

Description	*1918*	*1919*
Field crops	$1,372,936	$1,452,437
Farm animals	191,129	180,084
Wool	12,400	11,000
Dairy products	248,908	252,320
Fruits and vegetables	40,000	40,000
Poultry and eggs	40,000	40,000
Total	$1,905,028	$1,975,841

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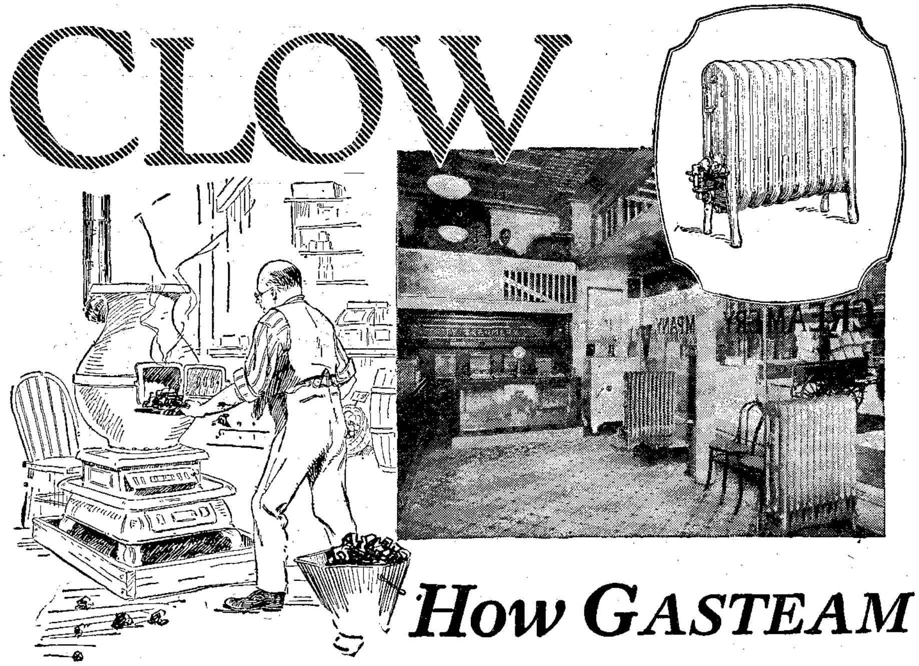

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INVESTMENTS AND FINANCE
Continued

THE MONEY STRINGENCY AND SUGGESTED REMEDIES

A BRIEF memorandum showing at a glance the causes of the existing money stringency and a possible program for relieving it has been prepared by the brokerage firm of A. B. Leach & Co. It is presented as follows in the news columns of the Boston *News Bureau:*

The cause of the money stringency:

1. Transfer of large sums to Europe, in particular: (*a*) For the purchase of foreign internal and foreign-owned American securities, for real estate, control of foreign enterprises, luxuries (such as precious stones and high-priced semiluxuries, as silks, etc.) (*b*) To support dependents and by emigrants in person. (*c*) For relief work abroad. (*d*) Enormous speculation in foreign exchange.

2. Hoarding (outright by the foreign element), and for the purpose of future purchases of "bargains" in material and securities.

3. Reduction of producing power of labor in general by twenty per cent. to fifty per cent., making necessary the investment of tremendously increased amounts in the labor cost of all raw materials and finished goods, including foodstuffs.

4. Lack of thrift (the craving for luxuries and non-essentials is still general).

5. Transportation difficulties causing the storing-up of essential goods and thereby restricting additions of new wealth.

6. The preparation for the financing of the crops, which requires the contraction of loans and the curtailment of new issues of securities. Nos. 4, 5, and 6 are the principal causes working against the accumulation of surplus capital, which is the essential need for industrial expansion.

7. Instalment payments on Federal taxes restricting, temporarily, the use of large amounts of money for productive purposes,—this on account of the slowness in getting this money back into the banks, available for commercial needs.

8. The uncertainty of the political outlook.

The possibilities for relief:

1. Improvement in the labor situation: (*a*) By a return to prewar efficiency. (*b*) By the functioning of courts of mediation in disputes. (*c*) By education (mutually of capital and labor and the liberalizing of the leadership of labor). (*d*) By a broad-minded immigration policy (possibly by unemployment in certain over-expanded industries, as automobiles, silks, shoes, clothing, shipyards).

2. The addition of new wealth from agricultural crops, the principal ones of which are estimated to yield the following quantities:

Wheat	809,000,000 bushels
Corn	2,779,000,000 "
Oats	1,322,000,000 "
Cotton	11,450,000 bales of 500 lbs. each
Hay	110,000,000 tons

It is difficult to state the amount of new wealth which the above quantities will represent, but a conservative estimate would be in excess of two billion dollars.

3. Interest payments on foreign debts to the United States and payments to reduce these debts, which debts, with the

INVESTMENTS AND FINANCE
Continued

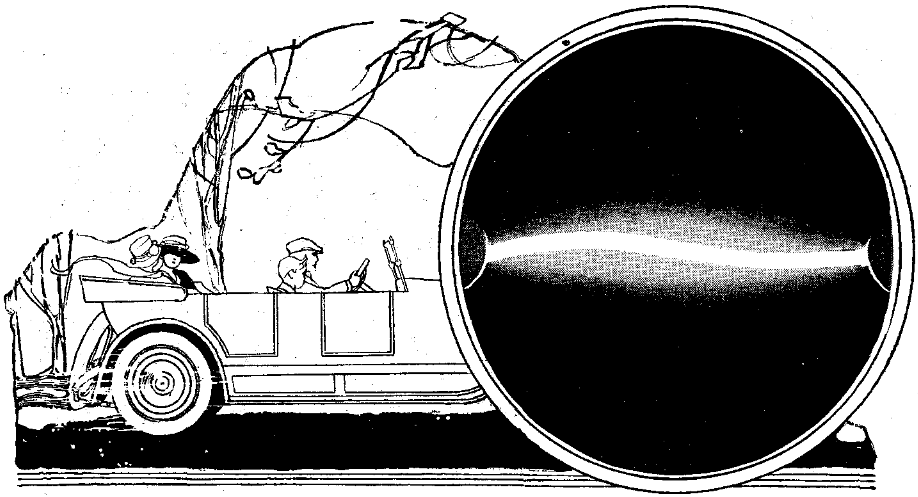
improvement of the productive power of Europe, will gradually be substituted by the largely increased importation of goods.

4. The improvement in the transportation situation.
5. The improvement of the financial and economic conditions of the principal European countries.
6. A "business" Government.
7. Improvement of the Federal Reserve machinery.

AMERICA SENDING LESS FOOD TO EUROPE

"EUROPE, through inclination or necessity, is looking less to the United States for its daily food," and "with good harvests here that tendency may yet aid somewhat to lower living costs on this side." This cheerful statement is made by the Boston *News Bureau* in its comment on trade reports for June. Our total exports were but $725,000,000 for the month as contrasted with $928,000,000 for June, 1919. Nearly 8 per cent. of that extreme contrast, says *The News Bureau*, "was accounted for by the decrease meanwhile in our shipments of grain, meats, cotton, and oil. These dropt, as between the two Junes, from $484,000,000 to $229,000,000, or practically 50 per cent., while all other exports shrank only from $484,000,000 to $402,000,000, or about 18 per cent." The Boston paper continues:

> We are sending considerably more oil abroad, in response to the world-wide demand for both sea and land use; but in all other natural products of the soil there is a decided recent recession. It is most pronounced in meat and dairy lines, in which the total for last month was only $48,000,000, as against $174,000,000 a year earlier. How the record has run in volume in the important staples of this class is equally significant, as follows (pounds):
>
> | | *June* | | *Twelve Months* | |
> |---|---|---|---|---|
> | | *1920* | *1919* | *1920* | *1919* |
> | Beef........ | 3,850,000 | 7,223,000 | 47,832,000 | 132,615,000 |
> | Bacon...... | 60,730,000 | 172,441,000 | 803,666,000 | 1,238,000,000 |
> | Hams and shoulders. | 21,277,000 | 96,854,000 | 275,455,000 | 667,240,000 |
> | Lard....... | 45,069,000 | 114,328,000 | 587,224,000 | 724,771,000 |
>
> Recent travelers returning from Europe have told of large stocks of provisions warehoused in parts of northern Europe still waiting a final market. We have no longer an army abroad calling for large rations of this sort. The more pressing dietetic needs of some of the war-stinted countries have been filled since the armistice. As a result there is the above rather natural tapering off from the impressive share which packing products took during the war and shortly after.
>
> Likewise cotton and grain display a fairly sharp falling off from recent monthly export totals. Here there is more effect of both seasonal and foreign exchange conditions. In cereals the comparatively moderate drop tends to accentuate the tendency of food exports' relation to total exports, which has been running at only 27 per cent. recently as against 35 per cent. a year before.



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17. Do you ever test "specific gravity" with a "mag"?
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18. Do you ever "drain electrolyte" from a "mag"?
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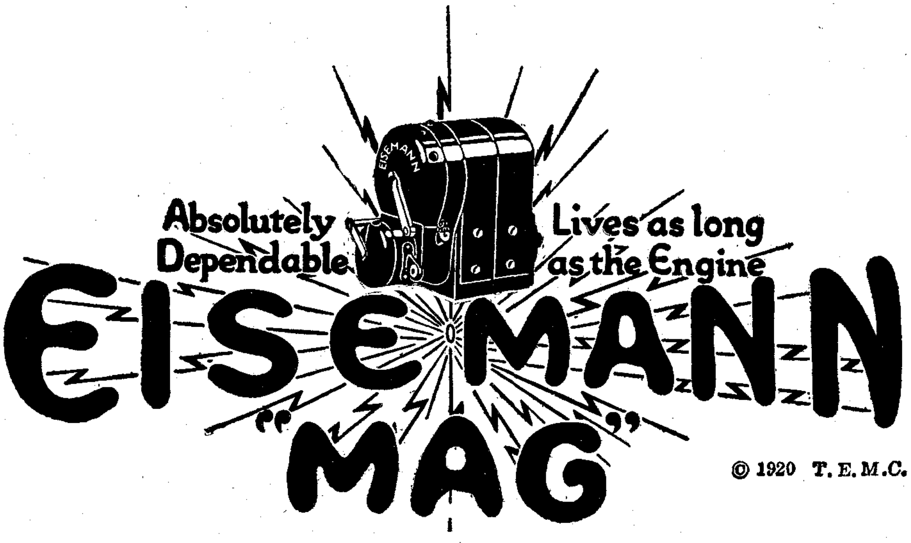
19. Do you have to "remember to switch off the current" with a "mag"?
No. It stops automatically.

20. What do you do to a "mag"?
Give it a few drops of oil every 1000 miles or so and forget it.

(To be continued)



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D8

INVESTMENTS AND FINANCE
Continued

TO ENCOURAGE SAVING BY BONUSES

A READER of the bulletin of the National Savings Bank Association who is employed in a savings-bank writes to the editor to express his wonder at the fact that savings-banks have no scheme for inducing a depositor to keep up his account or to increase his balance by regular deposits. In fact, no discrimination is usually made between a desirable account and one of little benefit to the bank. So this writer suggests, as *Financial America* quotes his letter to the Association's bulletin:

It seems to me that the savings-banks might follow with profit some of the methods in use by insurance companies and commercial banks. Insurance companies devise schemes to keep their policyholders, and, to accomplish a certain result, will issue a special form of policy for that purpose.

For instance, the writer has had an accident policy in a local company for a number of years, and on examining it recently he found that the amount of benefits increased every year the policy was in force up to a certain limit without any increase in the premium. As a result it is to his interest to retain his insurance in that company rather than to change it to another company, because if he should change and the new company granted a policy on exactly the same terms as the original one, it would be several years before he would be entitled to the same benefits as under the original policy. Commercial banks discriminate between the good accounts and those that are not desirable by giving certain advantages or allowing interest on good accounts.

I think it would be perfectly right for a savings-bank to exercise some discrimination in the matter without doing an injustice to any depositor. There are a number of plans which naturally suggest themselves, but any method would require careful examination and probably an actual trial before it could be determined whether it would be advantageous to adopt it as a permanent policy. One method has been suggested, and that is, paying interest or making distribution of dividends only at the end of five-year periods to the holders of accounts at that date. While this method might accomplish good results, I think it would work an injustice to persons compelled to close their accounts during the period. It occurs to the writer that it might be possible to pay a small bonus, say one-quarter or one-half of one per cent. on the accounts from which there were no withdrawals during the year, or upon accounts on which there has been a regular increase in the balance from month to month or from quarter to quarter.

It is, of course, impossible to say whether such a method would accomplish the results desired, but the object to be attained is to make it to the advantage of the depositor to maintain his account and also to increase his balance during the year—that is to say, the bank should try to hold on to the good accounts and give all possible encouragement to a depositor to add to his savings.

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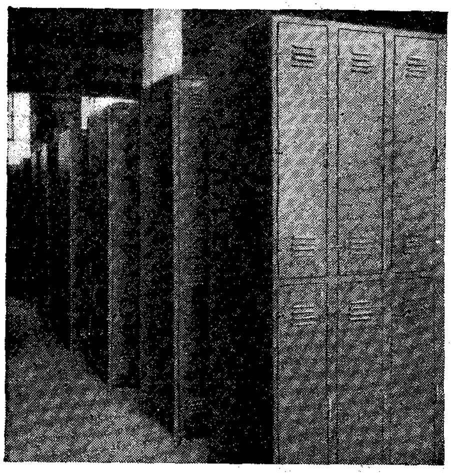

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CURRENT ◆ EVENTS

RUSSIA AND POLAND

July 28.—The Polish retreat continues along the entire front, according to the latest report on the fighting operations received from Warsaw.

July 29.—A Soviet revolution has started at Kovno, where the Lithuanian Government has been overthrown, says a report from Warsaw.

July 30.—Great Britain and France dispatch a notification to the Warsaw Government setting forth the limitations which those countries would put upon Soviet demands on Poland in the arranging of an armistice. Poland is not to be permitted to accept whole or partial disarmament, nor a change in the Polish system of government dictated by the Soviets, nor a boundary-line less favorable than that provisionally drawn by Premier Lloyd George, nor the use of Poland as a bridgehead between Germany and Russia.

July 31.—Bolshevik troops pursuing the defeated Poles reach the East Prussian frontier and are fraternizing with the Germans, according to dispatches from Warsaw.

It is reported from Berlin that the Polish northern army has been virtually destroyed. The troops are said to be completely out of control of their officers, and the flight in the last few days has degenerated into a rout.

August 1.—Advices reaching Paris state that the Russian Soviet Army is now within seventy-five miles of Warsaw.

August 2.—Roumania serves an ultimatum upon Soviet Russia giving the Soviets three days to withdraw their troops from Roumanian territory, says a Belgrade dispatch.

The Polish and Bolshevik armistice delegates meet at Cobryn on the railroad east of Brest-Litovsk and negotiations begin.

August 3.—Official dispatches from Moscow to London report that the Bolshevik armies are overcoming the Polish forces on a front of 120 miles, and that the "Reds" now are only sixty miles from Warsaw. It is said they have laid their plans to enter the Polish capital on August 9. It is further reported that a provisional Soviet has been formed in the parts of Poland occupied by Soviet troops.

The negotiations for an armistice between the Poles and the Bolsheviki end abruptly and the Polish delegates are said to be retracing their steps homeward. Bolshevik troops are reported everywhere to be pressing their attacks on the entire battle-line, from East Prussia to the region adjacent to Lemberg.

It is reported from Paris that the French look with apprehension upon the signs of agitation in Germany accompanying the news of Bolshevik successes against the Polish forces. It is felt that parts of Germany will become "Red" if Poland succumbs to the peril threatening her.

President Wilson discusses the Polish situation with his Cabinet for nearly two hours, considering the possible extent to which the United States might become involved in the event that the Allied European governments should decide to go to Poland's aid.

FOREIGN

July 28.—Francisco Villa, Mexican bandit leader and for years a menace in northern Mexico to the Government of his country, surrenders unconditionally to the de la Huerta Government. He is to be allowed a year's army pay for all his soldiers, numbering about eighteen hundred, it is said, and the leader himself, it is reported, has been given financial guaranties.

Roald Amundsen, Norwegian explorer, arrives in Nome after a two years' expedition in the Polar regions. After provisioning his vessel, he will start on a five-year expedition into the Arctic Ocean.

St. Gaudens's statue of Abraham Lincoln, presented by America to Great Britain, is unveiled in front of Westminster Abbey, London.

July 29.—It is reported from Mexicali, Lower California, that Estaban Cantu, Governor of the northern district of Lower California, is recruiting troops to repel what he describes as an impending "invasion" of Lower California by Mexican Federal soldiers. It is said that eight men formerly holding high rank in the army of the late President Carranza have offered their services to lead the Cantu forces.

The signing of the Turkish treaty has been indefinitely held up by quarrels between Italy and Greece, says a report from Paris. Greece threatens that unless Italy makes over to her the Dodecanese Islands she will refuse to sign.

Frank Brooke, deputy lieutenant of County Wicklow and chairman of the Dublin Southeastern Railway, is shot dead in the railway station at Dublin. The crime followed an exciting night in the Irish capital, during which the military police and the Sinn-Feiners clashed several times.

July 30.—A Constantinople report says the heir apparent to the Turkish throne sends the Sultan a letter renouncing his right to the Sultanate on the ground that the Califate has been undermined and rendered empty by the Treaty.

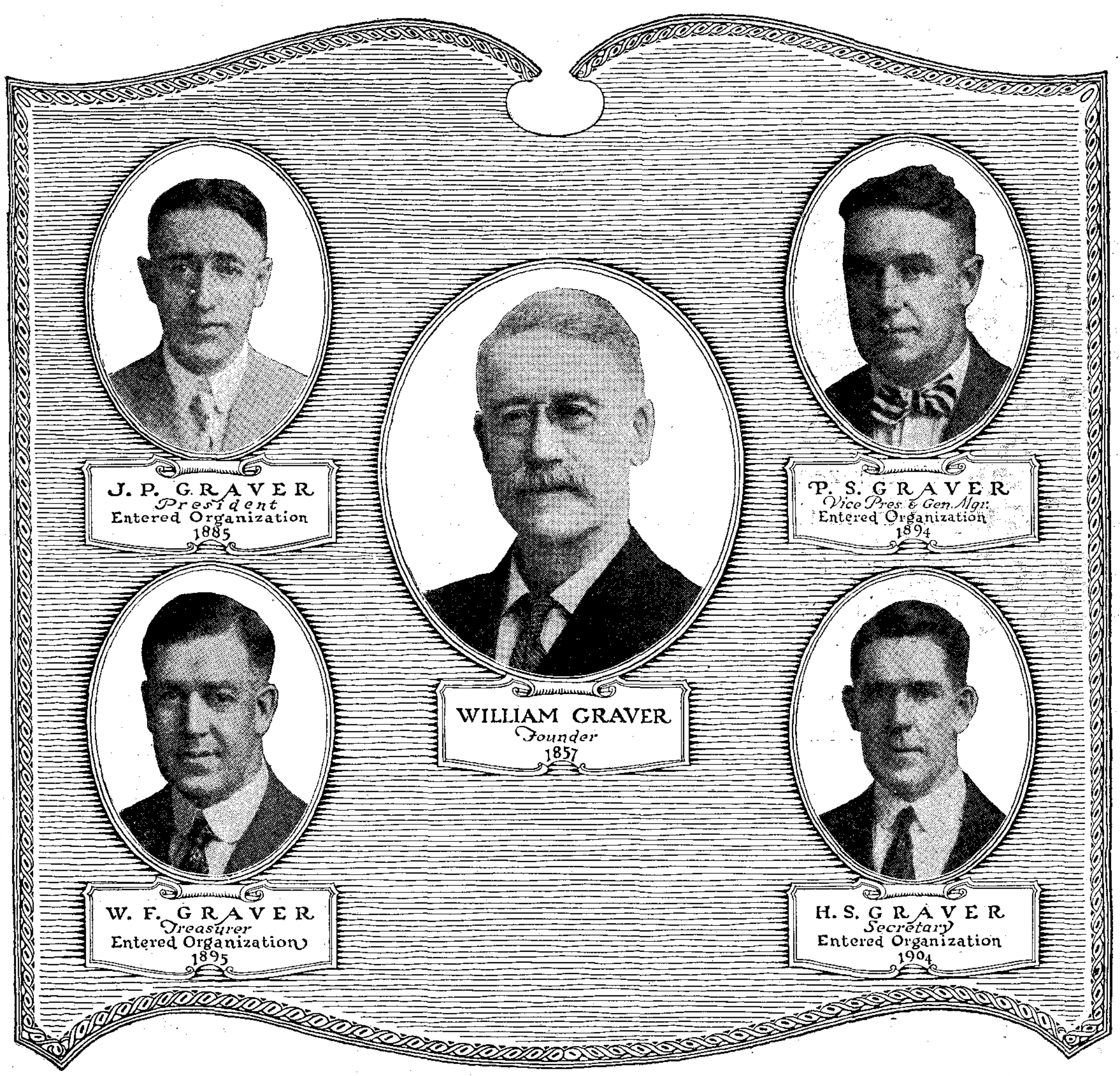
Governor Estaban Cantu, of Lower California, terminates relations between that State and the Mexican provisional Government, says a report from Mexicali. Preparations to resist the invasion which Governor Cantu expects from Mexican Federal troops are being carried on rapidly.

Premier Millerand of France gains the support of the Chamber of Deputies by a vote of 356 to 169 for the Spa coal arrangement, providing for a monthly advance of 200,000,000 francs to Germany.

Official statistics show that convictions for drunkenness in England and Wales doubled in 1919, the year following the war, over those of 1918, the number for 1919 being 57,948.

The Third Internationale at Moscow sends a long communication to the British Independent Labor party, among other things suggesting that the triumph of the proletariat involves a bloody revolution that will sweep through Europe and meet Great Britain and America in mortal conflict.

Official decrees are issued at Seoul, Korea, creating provincial, municipal, and village advisory councils. This is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Entered Organization
1885
P. S. GRAVER
Vice Pres. & Gen. Mgr.
Entered Organization
1894
WILLIAM GRAVER
Founder
1857
W. F. GRAVER
Treasurer
Entered Organization
1895
H. S. GRAVER
Secretary
Entered Organization
1904

GRAVER Quality Standards - the Heritage of 63 Years

FOR sixty-three years, since the founding of the Wm. Graver Tank Works in 1857, the maintenance of Graver Quality Standards has been in the keeping of William Graver and his sons.

It is a heritage jealously guarded, zealously upheld. Sometimes to maintain these standards without compromise has meant to lose a possible order. At other times it has meant slower production. Often it has meant smaller profits.

Yet, unswervingly, the Graver Standards have been maintained through thick and thin; stubbornly perhaps, but faithfully.

The result is a business institution to which is accorded an unusual measure of confidence by leaders of American Industry.

This confidence is frequently demonstrated by the awarding to the Graver Corporation of enormous contracts on a cost-plus basis; or again by the commissioning of its engineers to prepare for customers specifications as well as bids.

Graver Quality Standards mean true values. They mean an absence of experimentation at the customer's expense or risk. They mean reliability in the highest attainable degree.

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Steel Tanks and General Steel Plate Construction
Water Softening and Purifying Equipment

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"Packer's" pine-tree pedigree!

MEDICAL authorities have long recognized the helpful properties of pine-tar in the care of the hair and skin.

Nearly fifty years ago the makers of Packer's Tar Soap found a way to blend pure pine-tar with other necessary ingredients, such as glycerine and certain pure high grade, vegetable oils.

The result was Packer's Tar Soap—the shampoo soap used today by people who cultivate the "habit" of healthy hair.

"Packer's" begins its reconstructive work on the hair and scalp even with the first shampoo.

The wholesome, piney lather, well rubbed in, is exactly what your scalp needs to keep it pliant, active, healthy.

The systematic use of this well-known shampoo soap promotes a healthier condition of the scalp and an observably improved appearance of the hair.

PACKER'S LIQUID TAR SOAP, delicately perfumed, cleanses delightfully and refreshes the scalp—keeping the hair soft and attractive.

Send for these "PACKER" Samples

1. Half-cake of Packer's Tar Soap, good for several refreshing shampoos—10c.
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Dept. 84-H, 120 West 32nd Street, New York City

Packer's Tar Soap

"PURE AS THE PINES"

PACKER'S PRODUCTS ARE SOLD BY DRUGGISTS EVERYWHERE

CURRENT EVENTS
Continued

said in political circles to be a preliminary step toward self-government for the Koreans.

The first Chamber of the Dutch Parliament unanimously ratifies the loan of 200,000,000 guilders to Germany.

July 31.—The German Reichstag passes a bill providing for the abolition of compulsory military service. This action is in fulfilment of one of the Allied demands regarding German disarmament, agreed to by Germany at the recent Spa conference.

A Hungarian force of more than eight hundred armed and uniformed men cross the Austrian frontier and raid the Furstenfeld arsenal. The raid has caused renewed rumors that the Hungarians are planning to aid Poland.

Outlines of Japan's answer to the note of the United States protesting against Japan's intention to occupy Saghalien, Siberia, are printed in Tokyo newspapers. It is pointed out that Japan will hold the occupation to be unavoidable in order to maintain her national privileges, and that the decision to occupy the island will not be changed.

August 1.—The New York Yacht Club receives a telegram from the Nova Scotia Yacht Squadron announcing the intention of that organization to enter a challenger for the *America's* cup next July.

China asks an American group of bankers interested in the proposed consortium for an immediate loan of $9,000,000 for the purpose of disbanding troops and reconstructing the Government after the overthrow of the pro-Japan Cabinet.

At the opening session of a convention of British Communists in London an agreement is unanimously reached to form a Communist party in Great Britain "for the purpose of establishing Communist rule conferring power on the working classes and controlling all sources of production."

Fears are express in responsible quarters in Dublin that the Irish situation, which is gradually growing more tense, may burst into a general conflagration at any moment. It is said there is virtually no civil law south of the Boyne River except that administered by Republican courts. It is estimated there are between sixty and eighty thousand fully equipped British soldiers in Ireland, and they are being reenforced daily by men arriving from across the Channel.

Provisional President de la Huerta of Mexico announces that he has sixty thousand troops ready to force Governor Cantu, of Lower California, to comply with the orders of the Federal Government.

Congressional elections take place in Mexico quietly and apparently with little enthusiasm. Political observers forecast that the Liberals will carry the north and west, the Conservatives the central states, and the Socialists the Yucatan peninsula.

August 2.—Zittau, Saxony, a city of about thirty thousand population, is in the hands of radical workmen, says a Berlin report. It is said that the police have withdrawn and that a committee composed of Socialists, Communists, and Syndicalists have assumed authority over the city.

The formation of a new cabinet is announced in Turkey, with Damal Ferid

Honest Tires

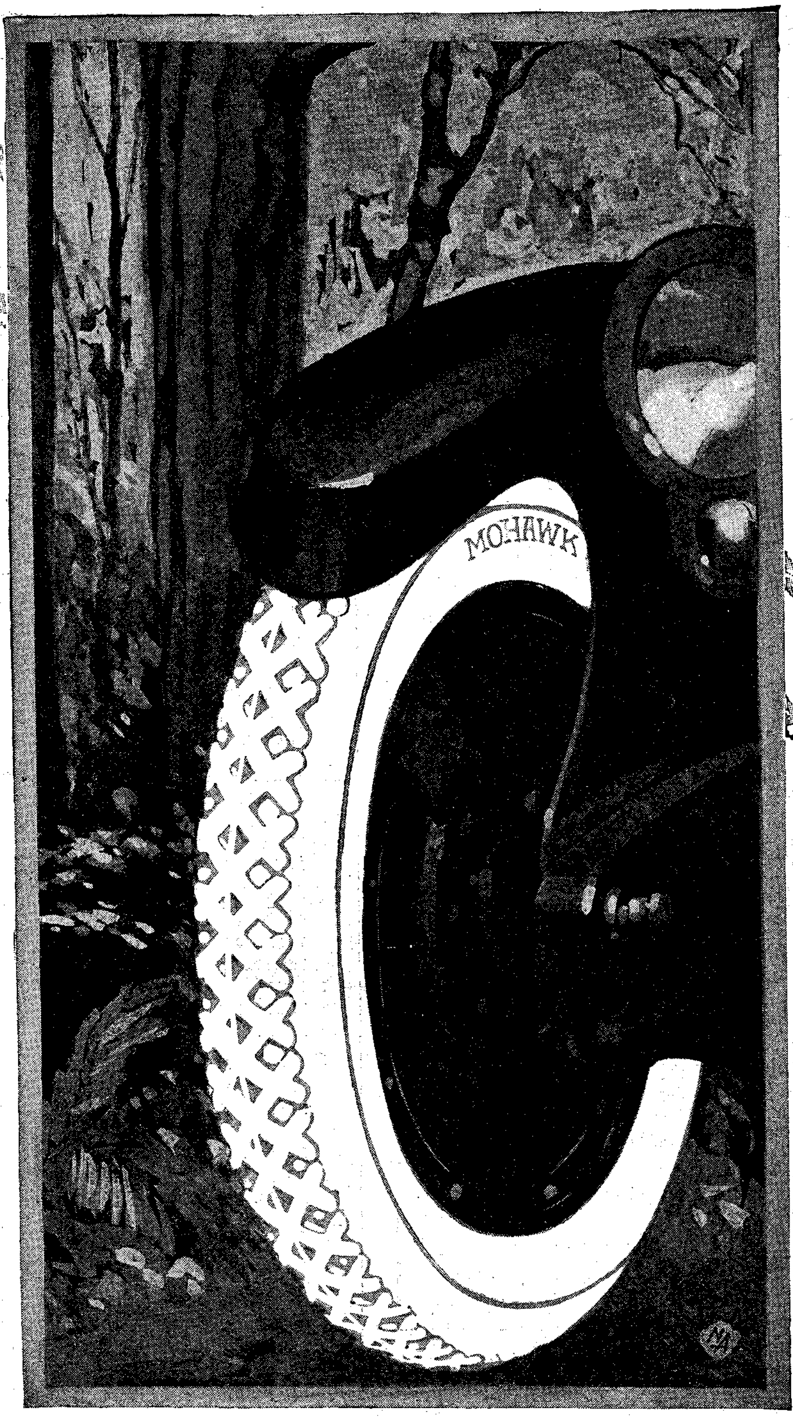
There is a wide variation in tire quality today chiefly because there is a varying opinion among tire makers as to the amount of mileage that should fairly be given for a tire's purchase price.

Tire mileage is almost entirely dependent on the use of pure rubber, strong fabric, and skilled workmanship, and the market for these things is open to all comers. But knowing that the tire buyer has no way of judging, before he purchases, the number of miles in a tire, many makers have yielded to the temptation to make the biggest profit possible by cutting down the cost of materials and workmanship to the minimum.

Then, there is a group of reputable manufacturers who are giving the buying public a good, honest value for their money. They are making a tire which ordinarily gives the expected mileage. Yet the troublesome necessity for frequent adjustments shows how close to the guarantee line the mileage of these tires is always maintained.

But the Mohawk Rubber Company is one of a small group of tire makers who believe in the business principle of building a tire as good as it can possibly be made—using generous quantities of the finest and purest grades of rubber the world's markets afford, the strongest of fabrics, and the most skilled hand-workmanship.

These tires are, of course, guaranteed the same as other tires. But the average mileage yielded is so far in excess of this amount that the user is freed from the troublesome necessity of adjustments. Moreover, the user soon learns that this extra mileage—a "heaping measure of miles," as it might be termed—makes a tire of this character by far the most economical.



We honestly believe Mohawk mileage averages somewhat higher than other tires even of this select quality group. We base this belief first on the extreme rarity of requests for adjustment. Second, on the almost unbelievable mileage records we are continually receiving. But, most of all, on the fact that our dealers' records prove that over 85% of all Mohawk trial buyers continue to use Mohawks exclusively thereafter. But as to this, a trial Mohawk placed on your rear wheel will be more convincing evidence than any statement of ours.

MOHAWK RUBBER COMPANY, AKRON, OHIO

KANSAS CITY DALLAS SAN FRANCISCO LOS ANGELES NEW YORK BOSTON CHICAGO ATLANTA

MOHAWK "Quality" HAND MADE CORD AND FABRIC TIRES

No Man Likes to Smoke Poorer Cigars

If economy for a time forces you to, you get small enjoyment from your smoking.

But suppose you could smoke just as good a cigar as you're accustomed to and yet make a considerable saving in expense.

Of course, you'd want to know how we could make such an offer to you.

We make cigars. We make them of a quality we can stand behind. We sell them straight to smokers, thereby cutting out two costs of handling as well as two profits.

If you smoke a two-for-a-quarter cigar, we can save you 4½ cents on every smoke. If you smoke a more costly cigar, we can save you more.

To prove that we can do this, we require only a letter from you to send you a box postpaid. You don't pay for these cigars unless you like them.

Our El Nelsor is 4¾ inches long, hand-rolled. Its filler is a perfect blending of long Havana and Porto Rico tobaccos. It is wrapped in Sumatra leaf, genuine.

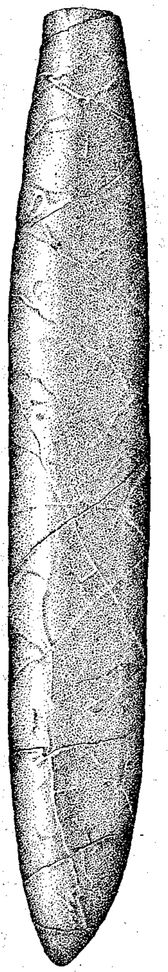
These are good cigars. We wait for you to decide they're good.

This is how we wait: Upon request, we send you a box of 50, postpaid. You are invited to smoke ten. If within 10 days you decide the box is not well worth the price, $4.00, you return the 40 unsmoked. We have no charge against you.

We make cigars good enough, you will notice, to sell and to stay sold.

In ordering, please use your letterhead or give reference; also advise us whether you prefer mild, medium or strong cigars.

We make many other brands.



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CURRENT EVENTS
Continued

Pasha as Minister of Foreign Affairs and acting Minister of War.

August 3.—The Saxon Government proclaims martial law over the area included in the Communist outbreak at Zittau, which is now in control of Communist guards.

It is announced that the International Communications Conference called under the auspices of the League of Nations will be held in Washington on September 15. It is expected the principal business of the conference will be to allot among the Allied and Associated Powers the German cables confiscated during the war.

DOMESTIC

July 28.—President Samuel Gompers, of the American Federation of Labor, issues a statement warning that organized labor will resist any reduction of wages and the laying off of workmen, and demanding continuous operation of industry as the only means to insure increased production.

July 29.—Seven United States war-ships are ordered to Turkish waters as a precautionary measure to protect American lives and property, should the necessity arise.

George White, the new national chairman of the Democratic party, announces that funds for financing the Democratic national campaign will be received in any amounts, and that party leaders will be concerned only with the sources from which the money comes.

Curtailment of industrial activity due to lower demand, cancelation of orders, and general readjustment were the outstanding developments in the business of the country during July, according to the monthly review of the Federal Reserve Board.

July 30.—John L. Lewis, president of the United Mine Workers of America, in compliance with the wishes of President Wilson, will issue a mandatory order instructing all miners now on strike in Indiana and Illinois to return to work immediately, so as to permit the normal operation of the mines.

July 31.—The Interstate Commerce Commission grants the railroads of the country authority to raise their freight- and passenger-rates to levels which will increase the revenues of the roads approximately $1,500,000,000.

The Illinois coal strike is called off by Frank Farrington, president of the State union. All locals in the State are ordered to return to work as soon as possible. Similar action is taken in Indiana.

August 1.—Advances of intrastate rates, freight, passenger, and Pullman, to correspond with the interstate increases authorized by the Interstate Commerce Commission, will be asked of the various State railway commissions by the carriers, according to an announcement made by the general counsel for the Association of Railway Executives.

J. Frank Hanly, former Governor of Indiana and candidate for President on the Prohibition ticket in 1916, is killed near Denison, Ohio, when a Pennsylvania freight-train strikes the automobile in which he is riding.

Eugene V. Debs, Socialist candidate for President, issues a request that the movement to free him from prison be discontinued, declaring that so long as his comrades "are held as criminals and convicts" his place is in prison.

August 2.—William Bross Lloyd, millionaire Socialist, and nineteen other members of the Communist Labor party are found guilty in the Federal Court in Chicago of conspiracy to overthrow the Government of the United States and are sentenced to various terms in prison.

The United States State Department announces that it has recognized the Government of Costa Rica, with Julio Acosta as the regularly elected President of the Republic.

The wholesale price of beef declined throughout the East an average of ten to fifteen per cent. between June 26 and July 24, according to an announcement of the American Institute of Meat Packers.

After a preliminary session of the Executive Council of the American Federation of Labor at Atlantic City, it is announced that Samuel Gompers, president; Frank Morrison, secretary; and James McConnell, head of the metal trades, have been appointed a committee with complete power to formulate a program of non-partizan political activity for the four million members of the Federation. It is announced that labor is not going to take a stand with either party in the impending national campaign, but will aim solely to support its friends and fight its enemies.

Imports of foodstuffs into the United States during the fiscal year ending June 30 increased by $680,000,000 over 1919, while exports of foodstuffs in 1920 show a decrease of more than $360,000,000, according to figures issued by the Department of Commerce.

Fifteen thousand negroes hold a mass-meeting in Madison Square Garden and pledge their "sacred blood" for the liberty and freedom of Africa. The convention was composed of delegates from all parts of the world, who came to help frame the new bill of rights for the negro.

August 3.—It is officially estimated that increased revenues to the amount of $100,000,000 annually will accrue to the Treasury as a result of the advance in transportation rates allowed the railroads. The added income would be derived from increased transportation taxes, paid by the public, and also through the operation of the income provisions of the revenue laws.

The gross national debt was reduced a total of $76,404,453 during July, leaving the public debt now at $24,222,917,013.

Recent reports of the Director of the Census gives the population of Cambridge, Massachusetts, as 109,694, an increase of 5,855; that of Lowell, Massachusetts, as 112,759, an increase of 6,465; and that of Albany, New York, as 113,344, an increase of 13,091. The population of Louisville, Kentucky, is also announced as 234,891, and that of New Orleans as 387,219. The total population of the State of Georgia is given as 2,893,601, an increase, since the 1910 census, of 284,480.

Hard Hit.—"What's wrong, old man? You look blue."

"Had a scrap with my wife this morning."

"Oh, don't let a little thing like that worry you. A thunder-storm clears the atmosphere, you know."

"Yes, but that doesn't help a man who's been struck by lightning."—*Boston Transcript.*

What compensates for that bump in the road?

The rear wheels strike the bump—the rear axle, as the springs flex, works up and down in a series of short violent jerks—every movement changes the axle's alignment with the motor.

Yet, because the universal joints and propeller shaft compensate for the changes in the position of the bounding rear axle, the flow of power is uninterrupted.

Spicer Universal Joints and Propeller Shafts deliver the power on a dominating percentage of all makes of cars and trucks.

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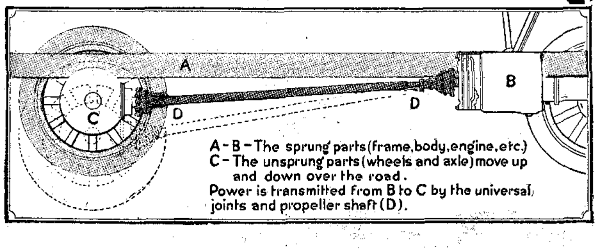
Write on your business letterhead for illustrated booklet covering Spicer Universal Joints and Propeller Shafts



A-B—The sprung parts (frame, body, engine, etc.)
C—The unsprung parts (wheels and axle) move up and down over the road.
Power is transmitted from B to C by the universal joints and propeller shaft (D).

Spicer

UNIVERSAL JOINTS AND PROPELLER SHAFTS

Charms of Youth

THE soft, red lips, the ivory throat, the smooth, firm skin unmarked by Time: these are charms of youth. And these are first to show the blighting touch of Age.

Do you know that the degeneration of tissues that comes with Pyorrhea is not unlike the degeneration of age?

The gums recede, the teeth decay, loosen and fall out, or must be extracted. The final stage of Pyorrhea is toothlessness that brings sagging muscles and sunken cheeks.

Don't let Pyorrhea become established in your mouth. Remember—this insidious disease of the gums is a menace to your health as well as to your beauty. To its infecting germs have been traced many of the ills of middle age.

Visit your dentist often for tooth and gum inspection. Watch your gums for tenderness and bleeding (the first symptom of Pyorrhea) and use Forhan's For the Gums.

Forhan's For the Gums will prevent Pyorrhea—or check its progress, if used in time and used consistently. Ordinary dentifrices cannot do this. Forhan's will keep the gums firm and healthy, the teeth white and clean.

How to use Forhan's

Use it twice daily, year in and year out. Wet your brush in cold water, place a half inch of the refreshing, healing paste on it, then brush your teeth *up and down*. Use a rolling motion to clean the crevices. Brush the grinding and back surfaces of the teeth. Massage your gums with your Forhan-coated brush—gently at first until the gums harden, then more vigorously. If the gums are very tender, massage with the finger, instead of the brush. If gum-shrinkage has already set in, use Forhan's according to directions and consult a dentist immediately for special treatment.

35c and 60c tubes in the United States and Canada.

At all druggists.

Forhan Company, New York
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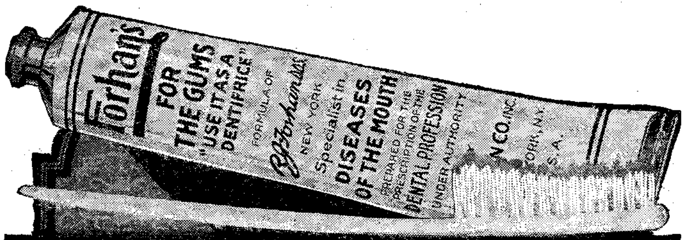

Forhan's
FOR THE GUMS
Checks Pyorrhea

THE SPICE OF LIFE

One Use for Them.—There wouldn't be any danger of a food shortage this winter if we could put all the politicians to hoeing corn and sowing wheat.—*Charleston News and Courier.*

Willing to Split.—We understand that one of the New Poor who recently found a burglar in his house searching for money immediately offered the intruder ten per cent. if he proved successful.—*Punch* (*London*).

Why He Wasn't Stolen Too.—Atlanta, Ga.—Patrolman J. O. D.—— reported to police thieves had stolen the bicycle furnished him by the city. Davis was not riding the vehicle at the time, he declared. —*Florida Metropolis.*

Foot-Rule for Matrimony.—The trouble with most marriages is that a man always makes the mistake of marrying the woman who carries him off his feet—instead of trying to find one who will keep him on them.—*Los Angeles Express.*

Temporary Summer Guests.—" But how could you rent your house? You have nowhere to live yourself now."

" Yes. But it will only be for a week. I'd like to see the guests who could stay longer than that in *my* house."—*Exlex* (*Copenhagen*).

One Worry Removed.—" Well, my dear, I've just had my life insured for five thousand dollars.

" Oh, how sweet of you! Now I sha'n't have to keep telling you to be careful every place you go."—*The American Legion Weekly.*

Why It Took Time.—They were looking down into the depths of the Grand Cañon.

" Do you know," asked the guide, " that it took millions and millions of years for this great abyss to be carved out? "

" Well, well!" ejaculated the traveler. " I never knew this was a government job."—*Southwestern Telephone News.*

Real Chivalry.—At a place " somewhere east of Suez " an intoxicated gentleman, after being ejected from a moving-picture theater, was discovered seated on the doorstep of the back entrance, with a large bouquet in his arms. A policeman arrested him.

" Did he give any reason for his extraordinary behavior? " asked the magistrate.

" His speech was a bit indistinct, your Honor," answered the policeman, " but from what I could gather he was waiting to see Mary Pickford home."—*Boston Transcript.*

Waiting for It to Move.—An old Cornish woman who had never before traveled by rail went to a country station to catch a train. She sat herself down on a seat in the station, and after sitting there for about two hours, the station-master came up to her and asked where she was going. On her telling him, he said:

" Why, my good woman, the train has just gone, and there isn't another for a long time! "

" Why, lor'! " says the old lady, " I thought the whole consarn moved! "—" *Humours of a Parish* " (*John Lane*).

Just So.—" Pa, what's a dead letter? "

" A letter that died at its post, my son." —*Boston Transcript.*

A Modern Curse.—Music is the language of the soul; jazz is its profanity.—*Providence Tribune.*

A Poser.—" Father, is the zebra a black animal with white stripes or a white animal with black stripes? "—*London Mail.*

Not Guilty.—*The New Republic* calls us " the Bourbon South." Alas and alack, those days are gone.—*Memphis News Scimitar.*

Political Note.—The Lady—" I will let no man conquer my heart, but I wouldn't mind letting two or three have a mandate over it."—*Jugend* (*Munich*).

High Temperature.—She—"Before we were married you used to say that I was the sunshine of your life."

He—"Well, I admit that you still do your best to make things hot for me."—*Boston Transcript.*

Instructions Needed.—Experts are full just now of advice on what to do when entering the sea. But we have searched in vain for guidance when the sea enters us, which it always does if we venture to bathe.—*London Opinion.*

Cooperation Required.—Guest—" Look here! How long must I wait for the half-portion of duck I ordered? "

Waiter—" Till somebody orders the other half. We can't go out and kill half a duck."—*Success Magazine.*

Where Pessimism Pays.—Said the weather prophet, " I think it is safest always to predict bad weather."

" Why's that? "

" Well, people are ready to forgive you if you turn out to be wrong."—*Yonkers Statesman.*

Fare " By Agreement."—" So you only take fares at agreed prices. What is your fare? "

" Where do you want to go to? "

" To my villa, No. 79 Roseneck Street."

" Good! It will cost you the villa."—*Lustige Blätter* (*Berlin*).

An Exodus Halted.—" Why do so many young men want to leave the farm? "

" Hadn't noticed that they do," replied Farmer Corntossel. " Most of 'm around here seem to have discovered that it is a heap harder to eat without workin' in the city than it is at the dear old home."—*Washington Star.*

Sacred and Baseball History.—Ira Andrews, the newly elected city clerk of Terre Haute, is active in Sunday-school work. Last Sunday he advised the children of his class that the morning study would be about Ruth, referring, of course, to the gleaner.

" Now," said Andrews, after introducing the subject, " who can tell me anything about Ruth? "

Up went a little hand in the rear of the class.

" Well, Willie," asked the teacher, " what do you know about Ruth? "

" He made twenty-nine home-runs last season " was the answer.—*Indianapolis News.*

Fleischmann's Yeast for Health

THE persistent drive for success....the unyielding goad of ambition....will wear out the most rugged constitution if mind and body are not regularly revitalized.

The Vitamine element in Fleischmann's Yeast relieves the "strain" and makes man the master of his work, confident and aggressive.

Fleischmann's Yeast completes the nutritive value of other foods. It keeps one "fit" and at proper weight. It makes children grow....it re-energizes those advancing in years.

Buy the regular cake of Fleischmann's Yeast in the familiar tin-foil package with the yellow label at your grocer's—then you are sure of the best and freshest yeast—accept no substitute.

Send coupon for the book "Yeast for Health." It gives the full story of the wonderfully curative value of Fleischmann's Yeast. Address The Fleischmann Company in your city or any of these offices.

THE WAY TO TAKE YEAST

Fleischmann's Yeast has an appetizing, creamy taste. You eat from one half to a whole cake 3 times a day before meals or take it crumbled in fruit juices or milk.

Fleischmann's Yeast is not a drug or medicine. It is a food and a tonic, and as such should be taken persistently for best results.

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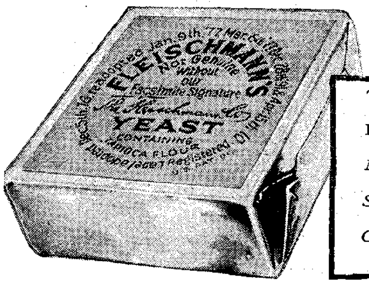

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You may send me without cost your "Yeast for Health" Book L820 as offered in this advertisement.

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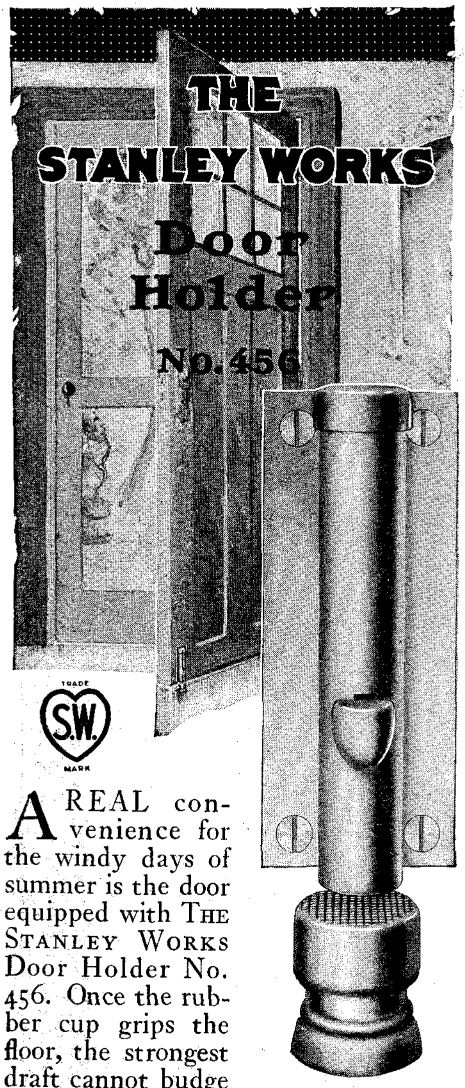
Fill in and mail this coupon today.



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Your nearest hardware dealer will gladly explain No. 456 in detail.

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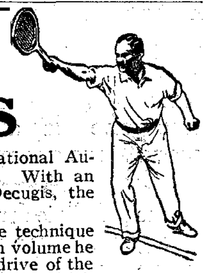
Chicago **New York**



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¶ **Important** because it offers a fresh view-point on Lincoln's struggles and successes, being the work of an English writer, the *Hon. Ralph Shirley.*

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THE ◆ LEXICOGRAPHER'S ◆ EASY ◆ CHAIR

Readers will please bear in mind that no notice will be taken of anonymous communications.

TO SEVERAL CORRESPONDENTS.—The writer for *The Sun* who claimed that Senator Harding invented the word "normalcy" overlooked the fact that it is nearly a century old and has been recorded in English dictionaries for at least seventy-three years. Its meaning is "the state of being normal; normality." It is used specifically in mathematics. There are not 17,500,000 words in the English language.

"R. B. McW.," Hamilton, O.—"Which is correct, 'six *biscuits*' or 'six *biscuit*'?"

The use of the singular to designate a plural quantity, altho occasionally heard, is not accepted as correct. "Six *biscuits*" is the correct form.

"H. A. L.," Washington, D. C.—"Please tell me who actually penned the Declaration of Independence."

"On the 10th [June, 1776] a committee of five was appointed to draw up the Declaration: Thomas Jefferson, of Virginia; John Adams, of Massachusetts; Benjamin Franklin, of Pennsylvania; Roger Sherman, of Connecticut, and Robert R. Livingston, of New York. Its composition was assigned to Jefferson by the committee; the latter and Congress made many changes, but mostly by omission rather than alteration of wording, so that the language is practically all Jefferson's."—*Encyclopedia Americana.*

"O. E. M.," Espanola, Wash.—"(1) Kindly tell me why Easter Sunday comes on different dates every year, and how do you tell on which date it will fall? (2) Of what nationality was St. Patrick? (3) Why do we observe St. Valentine's day?"

(1) *Easter day*, according to the decree of the Council of Nice, is the first Sunday after the paschal full moon, that is, the full moon that occurs on the day of the vernal equinox, March 21, or on any of the twenty-eight days following that date. Consequently, the earliest day on which Easter can fall is March 22 and the latest is April 25. (2) *St. Patrick* was born at Kilpatrick, near Dumbarton, in Scotland, in the year 387; he died at Saul, Downpatrick, Ireland, March 17, 493.—*Catholic Encyclopedia.* (3) *St. Valentine's day* is famous as a lovers' festival; this has no connection with the saints, but is perhaps the survival of an old festival, of a similar nature, in the Roman Lupercalia. It was observed particularly in England, but to a certain extent upon the Continent, too; mention of it is found as early as Chaucer. Consult Walsh's "Curiosities of Popular Customs," pages 952–957.

"W. W. V.," Henderson, Ky.—"What was George Washington's rank as an army officer including all his army career up to the time of his death—General or Lieutenant-General?"

The facts are that General Washington was appointed General and Commander-in-Chief of the *Continental* Army on June 15, 1775, and he held this rank until December 23, 1783. The United States Army was created by Act of Congress approved September 29, 1789. General Washington was appointed Lieutenant-General and Commander-in-Chief, United States Army, on July 3, 1799. This was the highest rank held by him in the United States Army.

"W. K. A.," Danville, Pa.—"Please inform me concerning the time, place, and circumstances under which Richard Harding Davis died."

Richard Harding Davis, author and war-correspondent, died of heart-disease on Tuesday night, April 11, 1916, at his home, six miles from Mount Kisco, N. Y. He went down-stairs at 9:40 to call the Western Union Office at Mount Kisco by telephone to send a telegram to a friend at the Harvard Club. Mrs. Davis called down-stairs shortly after midnight, and, getting no response, went to the library, where she found him on the floor near the telephone.

"J. H. L.," Washington, D. C.—"Kindly give me the correct pronunciation of the word *Amphion.*"

The word *Amphion* is correctly pronounced *am-fai'an*—first *a* as in *fat*, *ai* as in *aisle*, second *a* as in *final;* not *am'fi-an*—first *a* as in *fat*, *i* as in *habit*, second *a* as in *final*, a pronunciation formerly common in London with the middle class.

"D. C.," New Haven, Conn.—"Some dictionaries have Noah Webster's name in them and others Daniel Webster. Kindly tell me which is the original composer."

Noah Webster (October 16, 1758, to May 28, 1843) was an American philologist and lexicographer, while *Daniel Webster* (January 1, 1782, to October 24, 1852) was an American statesman, orator, and jurist; also, Secretary of State.

"R. P. A.," Sebring, O.—"Please give me the definition and pronunciation of *Limoges.*"

Limoges is defined as follows: "1. A manufacturing town in Haute-Vienne department, France, celebrated for its pottery and enamels Besieged and taken by the Black Prince, 1370 2. Porcelain ware made at Limoges." The name is pronounced *li''moz'*—*i* as in *police*, *o* as in *go*, *z* as in *azure*.

"A. H. C.," El Dorado, Ark.—The name *Maeterlinck* is correctly pronounced *ma'tar-link*—first *a* as in *art*, second *a* as in *final*, *i* as in *hit*, *n* as *ng* in *sing*.

"E. G. K.," Tacoma, Wash.—"Kindly inform me who first used the expression 'innocuous desuetude.'"

The author of the phrase to which you refer was Grover Cleveland—"After an existence of nearly twenty years of almost *innocuous desuetude* these laws are brought forth."—*Message, March 1, 1886.*

"F. W. S.," Mansfield, Pa.—"Soon after the assassination of President Lincoln, James A Garfield used these words—'Fellow citizens Clouds and darkness are around him; his pavilion is dark waters and thick clouds; justice and judgment are the establishment of his throne, mercy and truth shall go before his face! Fellow citizens! God reigns, and the Government at Washington lives.' Can you tell me where, when, and under what circumstances these words were spoken—at a public gathering, in some church-hall or theater, or from some balcony to a crowd in the street?"

The words to which you refer were uttered by James A. Garfield from the balcony of the New York Custom-House when the news of Lincoln's assassination was received. With these words he tried to calm an excited and angry mob.

"M. A. B.," Pittsburg, Pa.—"Kindly give me an explanation of the words '*nth power*' as in the sentence, '. . . waste and extravagance were raised to the *nth power*.'"

The dictionary under the letter *N* says: "4. *Math.* (n) An indefinite quantity; an indefinite or constant integer used as an exponent, coefficient, etc.; as, raised to the *n*th degree (involved to an indefinite power of one indicated by *n;* or figuratively, increased to an indefinite extent)."

"G. W.," Toledo, O.—"Has the word *sesame* a figurative meaning, and how did it derive this meaning?"

Under the phrase *open sesame* the dictionary says: "A charm to secure entrance or exit through any portal, especially to secure admission to some desired place or sphere; in allusion to the story, in the 'Arabian Nights,' of Ali Baba and the Forty Thieves, in which the door of a treasure-cavern opened only at the utterance of these words."

"R. O.," St. Joseph, Mich.—"Which is the correct phrase, 'Compared *to*' or 'Compared *with*'?"

You compare one thing *with* another (to note agreement or difference); you compare one thing *to* another (which it is believed to resemble).

"M. M. S.," Summerville, Pa.—"Please show the distinction between the words *like* and *love.* Is it permissible to use *love* in speaking of something that can not return the affection?"

Discriminate carefully between these words, which are often erroneously used interchangeably. A woman may *love* her children and *like* fruit, but not *like* her children and *love* fruit.